



**AGENDA AND MEETING NOTICE
OF THE NORTH TAHOE PUBLIC UTILITY DISTRICT
DEVELOPMENT AND PLANNING COMMITTEE**

Monday, April 13, 2026 at 9:30 a.m.

**North Tahoe Public Utility District
Administrative Offices
875 National Avenue
Tahoe Vista, CA 96148**

Welcome to a meeting of the North Tahoe Public Utility District
Development & Planning Committee

A meeting of the North Tahoe Public Utility District Development & Planning Committee will be held on Monday, April 13, 2026, at 9:30 a.m. at the North Tahoe Public Utility District Administrative Offices, 875 National Ave. Tahoe Vista, CA 96148

The District welcomes you to its meetings. Your opinions and suggestions are encouraged. The meeting is accessible to people with disabilities. In compliance with Section 202 of the Americans with Disabilities Act of 1990 and in compliance with the Ralph M. Brown Act, anyone requiring reasonable accommodation to participate in the meeting should contact the North Tahoe Public Utility District office at (530) 546-4212, at least two days prior to the meeting.

All written public comments received by 8:30 a.m. on Monday, April 13, 2026 will be distributed to the District Board Committee Members for their consideration at the meeting. Written comments may be emailed to mmoga@ntpud.org, mailed or dropped-off at NTPUD's Administrative Offices located at 875 National Ave., Tahoe Vista, CA. 96148.

1. CALL TO ORDER

- 2. PUBLIC COMMENT** – *Any person wishing to address the Development & Planning on Items on the agenda or matters of interest to the District not listed elsewhere on the agenda may do so at this time. Please limit comments and questions to three (3) minutes since no action can be taken on items presented under Public Comment.*

3. TOPICS OF DISCUSSION

- a. Review and Discuss Authorizing the General Manager to Execute Professional Services Agreements for the Pam Emmerich Memorial Pinedrop Trail Reconstruction Project and the Snow Creek Connector Trail Project – Recommendation to Full Board (*Pages 2-31*)
- b. Review and Discuss Awarding a Construction Contract and Authorizing the General Manager to Execute the Agreement with F.W. Carson Co. for the 2026 Water Main Replacement Project and Find that the Agreement is Exempt from the California Environmental Quality Act (CEQA) Under CEQA Guidelines § 15301 (Existing Facilities) – Recommendation to Full Board (*Pages 32-35*)
- c. Review and Discuss Awarding a Construction Contract and Authorizing the General Manager to Execute the Agreement with SFT Construction Corp. for the Annex Building Garage and Seismic Improvement Project and Find that the Agreement is Exempt from the California Environmental Quality Act (CEQA) Under CEQA Guidelines § 15301 (Existing Facilities) – Recommendation to Full Board (*Pages 36-39*)
- d. Review and Discuss Adopting Resolution 2026-03 – Adopting a Sewer System Management Plan – Recommendation to Full Board (*Pages 40-250*)

4. ADJOURNMENT



NORTH TAHOE PUBLIC UTILITY DISTRICT

DATE: April 14, 2026

ITEM: F-3

FROM: Planning and Engineering Department

SUBJECT: Authorize the General Manager to Execute Professional Services Agreements for the Pinedrop Trail Reconstruction Project and the Snow Creek Connector Trail Project

RECOMMENDATION:

1. Authorize the General Manager to execute a Professional Services Agreement in the amount of \$315,482 with Lumos and Associates for the final design and permitting of the Pinedrop Trail Reconstruction Project.
2. Authorize the General Manager to execute a Professional Services Agreement in the amount of \$259,598 with Lumos and Associates for the final design and permitting of the Snow Creek Connector Trail Project.

DISCUSSION

On September 16, 2024, the North Tahoe Public Utility District (NTPUD) Board authorized the General Manager to execute Amendment 1 to the Placer County Transient Occupancy Tax (TOT) Funds Grant Agreement, which increased the total grant amount from \$100,000 to \$600,000 for the Pam Emmerich Memorial Pinedrop Trail Extension – Planning and Design Project. This multi-year grant provides \$100,000 in Year 1, \$100,000 in Year 2, and \$400,000 in Year 3 of the grant.

On February 13, 2024, the NTPUD Board of Directors authorized staff to utilize funds from Year 1 of the grant (calendar year 2024) to hire Lumos and Associates to prepare construction drawings for the Pam Emmerich Memorial Pinedrop Trail extension from the trailhead to the lower restroom in the North Tahoe Regional Park.

On February 11, 2025, the NTPUD Board of Directors authorized staff to utilize funds from Year 2 of the grant (calendar year 2025) to hire Lumos and Associates to complete the preliminary engineering design of the Pinedrop Trail Reconstruction and Extension Project.

This item is seeking authorization to utilize funds from Year 3 of the grant (calendar year 2026) to hire Lumos and Associates to complete the final design and permitting of the Pinedrop Trail Reconstruction Project and Snow Creek Connector Trail Project.

The full scope of professional services includes the preparation of a topographic survey, construction drawing preparation, environmental clearances and permits, public outreach, and bid assistance to support the reconstruction of the existing Pam Emmerich Memorial

Pinedrop Trail with extension to State Route 267 and the trail extension to the existing Snow Creek Trail system at National Avenue. The two scopes of work are attached to this board item for reference.

Reno Tahoe Geo Associates, Inc. will prepare the geotechnical investigations for both projects via a professional services agreement authorized under the General Manager’s authority.

FISCAL ANALYSIS:

The final design scope for the Pinedrop Trail Reconstruction Project is \$315,482 and the final design scope for the Snow Creek Connector Trail Project is \$259,598.

Item	Amount
Pinedrop Trail Reconstruction Project	\$315,482
Snow Creek Connector Trail Project	\$259,598
Geotechnical Investigations	\$12,800
Placer County TOT Grant	(\$400,000)
Total District Commitment	\$187,880

The project will be funded with the TOT grant in the amount of \$400,000 and \$187,880 in matching funds from the Recreation and Parks Capital Fund to complete this scope of work.

The District’s Capital Improvement Plan Pinedrop Trail Reconstruction Project currently has \$500,000 budgeted in Fiscal Year (FY) 2026/27 in the Recreation and Parks Fund. This project will be divided into two separate projects (Pinedrop Trail Reconstruction Project and Snow Creek Connector Trail Project) to provide flexibility during design/permitting and in pursuit of construction grants. Additionally, the capital project budgets will be adjusted to cover the cost of the project independently.

The completion of the project design will span two Fiscal Years (FY) and, depending on the pace of execution, may require a budget augmentation to FY 2025/26 to allow expenditures originally anticipated for FY 2026/27 to occur in FY 2025/26. Importantly, the District currently has sufficient reserves and cash-flow to fund a portion of the design of the project in FY 2025/26.

Staff will continue to monitor the Recreation and Parks Capital Budget and will agendize a formal budget augmentation at a future meeting, should doing so become necessary.

STRATEGIC PLAN ALIGNMENT:

Goal 2: Provide high-quality community-driven recreation opportunities and event facilities – Objective D: Utilize the North Tahoe Regional Park as a community asset for passive and active recreation – Tactic 1: Increase accessibility of the Park – Activity b: Identify and develop areas throughout the Park with adjacency to interconnected trails; and – Activity c: Continue ADA accessibility expansion and development of resources throughout the Park;

and – Activity d: Begin efforts to renovate and improve the Pam Emmerich Memorial Pinedrop Trail.

ATTACHMENTS:

- Lumos and Associates, NTPUD Pinedrop Trail Reconstruction & Extension Design, Proposal for Engineering Services
- Lumos and Associates, Snow Creek Connector Trail Design, Proposal for Engineering Services

MOTION:

Approve Staff Recommendation

REVIEW TRACKING:

Submitted By:  Approved By: 
Joseph J. Pomroy, P.E. Bradley A. Johnson, P.E.
Engineering & Operations Manager General Manager/CEO

Reviewed By: 
Patrick Grimes
Chief Financial Officer



Lake Tahoe
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775.588.6490

March 27, 2026

Via email: nchorey@ntpud.org

EXHIBIT A

Mr. Nathan Chorey
North Tahoe Public Utility District
875 National Ave.
Tahoe Vista, CA 96148

**Subject: NTPUD Pinedrop Trail Reconstruction & Extension Design
Proposal for Engineering Services (LA26.036)**

Dear Mr. Chorey:

Lumos and Associates, Inc. (Lumos) is pleased to provide the North Tahoe Public Utility District (NTPUD) with this proposal for engineering and related services for the Pinedrop Trail Reconstruction & Extension Design.

Project Understanding

Lumos understands that NTPUD proposes to reconstruct, realign specific segments, and extend the Pam Emmerich Memorial Pinedrop Bike Trail, which is currently 1.25 miles long, extending from North Tahoe Regional Park to Pinedrop Lane. The proposed trail improvements span across multiple public and private parcels, including United States Forest Services (USFS) property, and the North Tahoe Regional Park property, located at 6600 Donner Rd. (APN: 112-010-015-000) in Tahoe Vista, CA 96148.

The existing Pam Emmerich Memorial Pinedrop Trail, proposed for reconstruction, is located within an easement on National Forest System (NFS) lands managed by the US Forest Service, Lake Tahoe Basin Management Unit (LTBMU). NTPUD would like to extend the trail approximately 500 feet along Pinedrop Lane to the right-of-way of SR 267, which could involve crossing private property, additional NFS lands, or county managed roads. This portion of trail and the rebuild require compliance with the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA).

A Special Use Permit (SUP) from LTBMU is required to construct the proposed trail improvements on NFS lands. The easement that the trail currently sits within is considered to be an outdated document, so LTBMU has stated that they will require the reconstructed portions and any new/realigned segments to be permitted together under one new SUP. It is also anticipated that a Tahoe Regional Planning Agency (TRPA) permit will be required and compliance with the Tahoe Construction General Permit.

Lumos has partnered with Ascent Environmental, Inc. (Ascent) to provide environmental studies and permitting documentation to support our surveying and engineering, design for the proposed improvements. Design objectives will include bringing the existing trail into conformance with

AASHTO Class I Bikeway standards, where practical, pulverizing the existing trail in place and repaving along the existing alignment, improving drainage crossings along the trail alignment, minor trailhead improvements, re-alignment of short segments, potential addition of retaining walls, and replacing the existing pedestrian bridge with a new prefabricated bridge.

We propose the following tasks to assist you with your project:

Project Scope

Task 1 – Topographic Survey & Project Basemap

Record Boundary Survey

Lumos will review available record maps and documents prior to beginning field work. During the field survey portion of this project, existing property corners, section corners and highway reference monuments will be located within the project area. A best fit of the boundary will be made based upon found monuments and record mapping. This task will not include any title verification or research of existing ownership. Ownership will be shown per current county records. There may be areas discovered that could have a material discrepancy in the record to what is found in the field. If this occurs we will present the findings. If the proposed improvements are close to any possible conflicts additional field work and research may be needed and ultimately a Record of Survey may be required. If this happens, we would appreciate the opportunity to provide a proposal for a modification to our scope and fees accordingly. The deliverable for this task will include record boundary delineation within the topographic survey deliverable referenced herein.

Topographic Survey

Lumos will prepare a topographic survey map at 1" = 20' scale with 1 foot contour interval accuracy in accordance with National Map Accuracy Standards for the project area. Existing surface improvements, trees greater than 12" dbh defined by species, striping/pavement markings, and visible surface evidence of utilities will be shown. The area to be mapped will be the Pinedrop Trail corridor as shown hereon as Figure 1. The survey corridor will generally be 30-40' wide, but will be tighter in areas identified by the Lumos Engineering team that do not require the full width, such as areas of remove and replace. The survey will also include the area needed for the paver amenity area near the end of Pinedrop lane.



Figure 1: Pinedrop Trail

Project datum will be referenced to modified state plane coordinates and NAVD88, consistent with the datum utilized during the 2025 survey efforts at this project site. Deliverables for this task will be a CAD file, including an Autodesk Civil 3D surface with appropriate breaklines.

Survey Schedule

Task 1 can be completed within **6-8** weeks of receipt of all required client provided information and a signed agreement, weather and snow permitting.

The attached draft project schedule assumes that snow along the survey corridor will be melted and survey can begin April 20, 2026.

Proposed fees for Task 1 include Placer County prevailing wage rates paid to all field crew members for time on site.

Task 2 – Structural Engineering

This task includes the design of the cast-in-place abutments and wing walls for the new prefabricated steel Pedestrian Bridge. Lumos will design the abutments and wing walls for the associated pre-fabricated bridge based on the reactions provided by the bridge manufacturer. The foundation design will be based on the geotechnical design requirements provided in the design report prepared by others.

Upon completion of the design, construction documents consisting of foundation drawings of the abutments and wing walls, along with associated detailing of the foundation system will be provided for construction. We will provide specification sections pertaining to structural items in the form of sheet notes. The drawings will be produced using AutoCAD, 2025 version.

The drawings and structural design calculations will be sealed by a professional engineer from Lumos for submittal to Placer County. Any plan review comments that might be issued by Placer County will be addressed.

Task 3 – Civil Improvement Plans

This task will include preparation of civil construction drawings for review by NTPUD, the Tahoe Regional Planning Agency (TRPA), Placer County (County), and the United States Forest Service (USFS) for permitting of the project improvements. It is our understanding that NTPUD will act as its own local permitting agency. Our development drawings for the onsite improvements will be prepared on 24"x36" format sheets, at a standard engineering scale, and will include:

- Title Sheet
- Legend, Notes, & Abbreviations
- Sheet Index
- Horizontal Control Plan
- TRPA coverage accounting sheet
- Improvement plan sheets
 - ±1.25 miles of trail reconstruction and realignment
 - Identification of demolition items, tree removals, and utility relocations as necessary
 - ±500 LF of 8-foot wide asphalt trail extension, designed to AASHTO Class 1 shared-use paths design guidelines.
 - One paver area with pet waste station, bench, trail map, and bear box trash enclosure.
 - Dimensions and grading as required for permitting and construction.
 - Property lines (per GIS data or ROW per record map calculations)
 - TRPA Temporary Erosion Control Measures
 - Proposed disturbance calculations
 - Driveway crossings
 - Realignment Sections
 - Coverage Calculations (based on existing coverage table to be provided by NTPUD)
- Details (including standard details, custom details, typical sections, drainage culverts, trail crossings, grading enlargements, detailed cross sections.

A conceptual 30% trail alignment, showing realignments and proposed extension, will be coordinated with NTPUD before beginning the design. Subsequent design coordination submittals will be made to NTPUD at 60%, 90%, and 100%. Deliverables for each phase will be as outlined below:

Conceptual Design (30%) – For Public Outreach & Initiation of USFS/CEQA/NEPA

- Conceptual-level design plans for preliminary review by NTPUD and use in public outreach.
- Conceptual-level Estimate of Probable Construction Cost

Schematic Design (60%) – For Placer County & TRPA submittals

- Schematic Design level plans, incorporating NTPUD comments from 30% design review and public outreach, to be submitted to USFS, TRPA, and Placer County for permitting.
- Technical Specifications Table of Contents
- Schematic Design-level Estimate of Probable Construction Cost

Bid Documents (90%)

- Bid documents incorporating NTPUD comments from 60% design review and review comments from TRPA, USFS, CEQA, NEPA, and Placer County
- Written responses to NTPUD 60% design review comments and permitting agency comments
- Bid Document Technical specifications in CSI format
- Bid Document Estimate of Probable Construction Cost
- These plans will be used for acknowledgement of TRPA, USFS, Placer County, CEQA, & NEPA permits to advertise the project for bidding.

Construction Documents (100%)

- Construction level design plans
- These plans will incorporate final design review comments from NTPUD and address any plan revisions or clarifications that might be required resulting from bidder questions/RFIs.
- Final technical specifications in CSI format
- Final Engineer's Estimate of Probable Construction Cost

The design schedule will begin once topographic survey files prepared under Task 1 are completed, which will be dependent on seasonal snow melt in spring 2026. From the time the topographic mapping files are completed and Owner's authorization to proceed, we anticipate that we can provide a conceptual layout to NTPUD within **4** weeks. The 30% Conceptual design will be used for initiation of USFS, CEQA, and NEPA permit submittals.

After the general path alignment and drainage improvement concepts are determined between Lumos and NTPUD and the public outreach meeting, Lumos will provide the 60% design submittal to NTPUD in approximately **6** weeks, which will be used for the TRPA and Placer County permit submittals.

Once we receive all permitting agency comments on the 60% submittal, we will address those comments and progress the plans to 90% design level in approximately **4** weeks. The 90% design plans will incorporate all NTPUD and permitting agency review comments.

Once final NTPUD comments and additional agency comments, are received, we will address these comments and finalize the 100% stamped design plans for permit acknowledgment and to advertise the project for bidding in approximately **3** weeks.

Task 4 – Design Meetings & Project Management

Our scope under this task includes Lumos' participation in meetings and project management. Meetings covered under this task include bi-weekly virtual design coordination meetings with NTPUD (from July 2026 through April 2027), a Conceptual Design (30%) review meeting, a Schematic Design (60%) review meeting, a Design Development Documents (90%) review meeting, Construction

Documents (100%) review meeting, , and a single site visit after the 30% design submittal to walk the trail alignment with NTPUD staff.

Task 5 – Placer County Encroachment Permit

It is anticipated that the extension of the Pinedrop Trail will encroach into the Placer County ROW at the east end of Pinedrop Lane and will require an encroachment permit. Under this task our team will submit the following to Placer County for review:

- Encroachment Permit Application
- Site Plan showing: site address; APN number; adjacent road(s) name(s); property owner(s) name(s); property lines and corners; north arrow; dimensions of proposed work; existing features (structures, fences, landscaping); slopes, flow directions and conveyance systems in the right-of-way; proposed permanent Best Management Practices (BMP's); and edge of pavement of road for width of parcel/property.

Task 6 – Environmental Documentation

Based on preliminary plans (30% design) prepared by Lumos for the proposed project (rebuild, extension, and new trail), Ascent will initiate the required CEQA and NEPA documentation.

Subtask 6.1: CEQA Documentation (Assumes IS/ND or IS/MND)

Ascent will prepare a draft Initial Study Checklist (IS), which will address all required environmental issues in Appendix G of the State CEQA Guidelines. If it is determined during preparation of the IS that no significant impacts would result from project implementation or that identified significant impacts would be reduced to a less-than-significant level through the application of project resource protection measures, a negative declaration (ND) or a mitigated negative declaration (MND) will be prepared with NTPUD serving as the CEQA lead agency.

6.1a: Administrative Draft IS/ND or IS/MND

Ascent will prepare an administrative draft IS/ND or IS/MND using NTPUD's preferred format and will verify that the content is consistent with State CEQA Guidelines Section 15071. For each environmental topic, we will include a brief environmental setting, followed by impact analysis with supporting narrative discussion. The administrative record (i.e., references cited in the IS/ND or IS/MND) will also be prepared and submitted to NTPUD in this task.

In addition, conclusions from the field surveys will be synthesized and presented. Mitigation measures may be required to address significant impacts based on established CEQA thresholds. All conclusions will be supported by substantial evidence. Ascent will work with NTPUD to refine any mitigation measures prior to finalizing the administrative draft IS/ND or IS/MND. This scope of work assumes one round of NTPUD review.

6.1b: Public Draft IS/ND or IS/MND and Notice of Intent

After NTPUD's review of the administrative draft IS/ND or IS/MND, Ascent will prepare the public draft IS/ND or IS/MND, which will reflect the final comments from NTPUD staff. Ascent will be responsible for the preparation of all required CEQA notices, transmittals, and electronic filings and the distribution of the ND or MND (Notice of Completion [NOC], Notice of Intent [NOI]). Ascent will

arrange for posting the required notices and IS/ND or IS/MND with the State Clearinghouse and Placer County Clerk-Recorder's office. NTPUD will be responsible for any media publications or direct mail/email to responsible and trustee agencies and other interested stakeholders.

6.1c: Final IS/ND or IS/MND, Response to Comments Memorandum, and Mitigation Monitoring and Reporting Program

At the close of the public review period, Ascent will review all comments received on the draft IS/ND or IS/MND and will prepare a memorandum that responds to the comments received. This step is not required by CEQA but is recommended by Ascent to document NTPUD's "consideration" of public and agency comments received, which is required by CEQA. Ascent will also finalize the IS/ND or IS/MND and make any revisions to address comments or provide clarification. It is assumed that no more than 20 comments are received and that they are limited to clarifying questions only. If new analysis is required, a separate scope and fee could be prepared to address the additional analysis.

At the close of the public review period and in combination with preparation of the final IS/ND or IS/MND, Ascent will prepare a draft and final Mitigation Monitoring and Reporting Program (MMRP) for NTPUD adoption.

6.1d: Notice of Determination

Following ND or MND adoption by NTPUD, Ascent will prepare the Notice of Determination (NOD) and submit it electronically to NTPUD for signature. Ascent will arrange for posting at the State Clearinghouse and County Clerk-Recorder's office within 5 days of project approval. It is assumed that NTPUD will provide the fee (\$2,968.75 for an ND or MND in 2025) for the required California Department of Fish and Wildlife filing with the Placer County Clerk-Recorder's office.

6.1e: Assembly Bill 52 Consultation

Assembly Bill (AB) 52 established a consultation process with California Native American tribes for proposed projects in geographic areas that are traditionally and culturally affiliated with that tribe. As the lead agency under CEQA, NTPUD must begin consultation with California Native American tribes traditionally and culturally affiliated with the project area prior to the release of the IS/ND or IS/MND if: (1) the tribe requested in writing to be formally notified of projects in the tribe's traditionally and culturally affiliated area; and (2) the tribe responds, in writing, within 30 days after formal notification from NTPUD requesting consultation (Public Resources Code Section 21080.3.1[b]). NTPUD is required to begin the consultation process within 30 days of receiving a tribe's request (PRC Section 21080.3.1[d-e]).

Ascent may assist NTPUD, if requested, with the AB 52 process by drafting the notification letter to interested Native American tribes for use by NTPUD. For the purposes of this proposal, we assume that no tribes will wish to consult. If any tribe expresses a desire to consult with NTPUD pursuant to AB 52 and assistance from the Ascent team is requested, an amendment to the scope and budget will be necessary.

Deliverables

- ▲ Administrative Draft IS/ND or IS/MND and administrative record – electronic submittal (MS Word)

- ▲ Public Draft IS/ND or IS/MND for public review – electronic submittal (MS Word and PDF)
- ▲ Notice of Intent
- ▲ Filing of NOI with State Clearinghouse/CEQAnet (performed by NTPUD staff [or delegated to Ascent] with an account with CEQA Submit) and County Clerk-Recorder’s office
- ▲ Distribution of NOI via email to public agencies as determined in consultation with NTPUD.
- ▲ Draft and final memorandum with responses to draft IS/ND or IS/MND comments – electronic submittal (MS Word and PDF)
- ▲ Final IS/ND or IS/MND – electronic submittal (MS Word and PDF)
- ▲ Draft and Final MMRP – electronic submittal (MS Word and PDF)
- ▲ NOD
- ▲ Posting of NOD at County Clerk-Recorder’s office
- ▲ Electronic filing of NOD with State Clearinghouse
- ▲ AB52 Notification Letter

Subtask 6.2: NEPA Documentation (Assumes Categorical Exclusion)

6.2a Technical Specialist Reports

Technical specialist reports are required by LTBMU to support the NEPA document. It is assumed that LTBMU will require the following reports. If LTBMU determines additional reports are required, a separate scope and cost can be prepared if requested.

- Single combined **Biological Evaluation/Biological Assessment** to cover Forest Service sensitive species and federally listed species.
- **Migratory Bird Treaty Act Report** will discuss birds of conservation concern and other migratory birds; project effects on migratory land birds; and resource protection measures that been incorporated into the project design to minimize, avoid, and reduce potential adverse effects on migratory birds and other biological resources.
- **Invasive Plant Risk Assessment** presents an analysis of the invasive plant species survey to manage and assess invasive species infestations within the project area. The IPRA describes the location and size of existing noxious weed infestations in the project area, identifies potential vectors for weed spread from project-related activities and changes in habitat that might favor the introduction of new weed species into the area, and describes resource protection measures designed to avoid, eradicate, and minimize weed infestations.
- **Cultural Resources Technical Report** will be provided in Task 1.1.

These reports will follow templates and guidance provided by LTBMU. Ascent may modify the example template formats with prior approval by LTBMU. This scope of work assumes LTBMU will provide to Ascent available data on surveys and known occurrences of threatened, endangered, and sensitive (TES) species and invasive plant species, including GIS data, which coupled with the surveys conducted in Task 1 are sufficient for report preparation.

A draft and a final version of each technical report will be prepared. The final version will incorporate LTBMU and NTPUD comments provided to Ascent.

Deliverables

- ▲ Draft and final LTBMU technical specialist reports (electronic submittal):
 - ▲ Biological Evaluation/Biological Assessment for USFS sensitive species and federally listed species
 - ▲ Migratory Bird Treaty Act Report
 - ▲ Invasive Plant Risk Assessment

6.2b Categorical Exclusion

Based on a review of NEPA documentation for other similar trail projects located on LTBMU managed lands, Ascent believes that this project would fall under a categorical exclusion for which a project or case file and decision memo are required. The appropriate category would be confirmed with LTBMU staff at the pre-application meeting with LTBMU special uses staff. At a minimum, the project or case file will include any records prepared, such as: the names of interested and affected people, groups, and agencies contacted; the determination that no extraordinary circumstances exist; a copy of the decision memo; a list of the people notified of the decision; and electronic copies of documents cited in the NEPA technical specialist reports and decision memo.

The project would likely fall under one of the following categories of categorical exclusions:

- ▲ Construction and reconstruction of trails (requires ADA accessibility). (36 CFR 220[e][1])
- ▲ Approval, modification, or continuation of special uses that require less than 20 acres of NFS lands. (36 CFR 220[e][3])
- ▲ Construction, reconstruction, decommissioning, or disposal of buildings, infrastructure, or improvements at an existing recreation site, including infrastructure or improvements that are adjacent or connected to an existing recreation site and provide access or utilities for that site. Recreation sites include but are not limited to campgrounds and camping areas, picnic areas, day use areas, fishing sites, interpretive sites, visitor centers, trailheads, ski areas, and observation sites. Activities within this category are intended to apply to facilities located at recreation sites managed by the Forest Service and those managed by concessioners under a special use authorization. (36 CFR 220[e][22])

The Decision Memo will be prepared that includes: (1) the location of the proposed action, including administrative unit, county, and state; (2) decision to be implemented and the reasons for categorically excluding the proposed action, including the category of the proposed action and the rationale for using the category, and a finding that no extraordinary circumstances exist; (3) any interested and affected agencies, organizations, and persons contacted; (4) findings required by other laws such as findings of consistency with the forest land and resource management plan as required by the National Forest Management Act; (5) the date when the responsible official intends to implement the decision and any conditions related to implementation; (6) whether the decision is subject to review or appeal, the applicable regulations, and when and where to file a request for review or appeal; and (7) the name, address, and phone number of a contact person who can supply further information about the decision; and the responsible official's signature and date when the decision is made.

Deliverables

- ▲ Case/Project File
- ▲ Draft and final Decision Memo

Subtask 6.3: USFS Special Use Permit

The existing multi use path was constructed and is operated under an easement with the LTBMU. To construct the proposed trail improvements (rebuild, extension, and new path), it is assumed that obtaining a special use permit (SUP) from LTBMU is required. A special use authorization is a legal document such as a permit, which allows occupancy, use, rights, or privileges of NFS land. The authorization is granted for a specific use of the land for a specific period of time. The first step in the SUP process is to attend a pre-application meeting with LTBMU special use staff and NTPUD to confirm the process that LTBMU would like to follow. For the purposes of this scope and fee, we included budget to cover the pre-application meeting and preparation of the information listed below.

- ▲ Project Description that includes sufficient detail to enable LTBMU to determine feasibility, environmental impacts, benefits to the public, the safety of the request, lands to be occupied or used, and compliance with applicable laws and regulations.
- ▲ Environmental Protection Plan that includes proposed plans for environmental protection and rehabilitation during construction, maintenance, removal, and reclamation of the land. Lumos would prepare the map with details (see below), whereas Ascent will prepare a list of resource protection measures that would be incorporated into the project and refined through specialist report preparation and NEPA documentation (Task 2.2) and an operations and maintenance plan. We assume LTBMU would provide an example operations and maintenance plan from a similar trail project that would serve as a template.
- ▲ Map (US Geological Survey quadrangle or equivalent) or plat (survey or equivalent) showing the requested use in relation to NFS land, identification of applicant's property (if applicable), scale, map legend, legal description, and a north arrow.
- ▲ Technical and financial capability statement that provides documentation to assure LTBMU that NTPUD is capable of constructing, operating, maintaining, removing the use off NFS land, and reclaiming the land after the authorization terminates. We assume this will be completed by NTPUD.
- ▲ A description and location information for alternatives considered, including alternatives that would avoid use of federal land.

If the LTBMU requires additional information beyond what is listed above, a scope amendment would be warranted.

Deliverables

- ▲ Draft and final SUP application package

Subtask 6.4: TRPA EIP Recreation Permit

Ascent will prepare and assemble a TRPA Environmental Improvement Project (EIP) Review Application Package, which includes a project description, complete application, Initial Environmental Checklist, list of affected parcels, and site plans and BMPs (prepared by Lumos). It is assumed that no excavation deeper than 5 feet would occur triggering a soils hydro permit application. It is also assumed that a land capability district and land coverage application would not be required because bike paths are exempt from coverage requirements per TRPA Code Section 30.4.6.D.3. It is assumed

that any coverage accounting that is required will be provided by Lumos. Ascent will submit the material to TRPA via the Accela online system. If it is determined that the whole of the project is qualified exempt under the TRPA-NTPUD MOU, the scope and fee can be amended to reflect the reduced level of effort.

Deliverables

- ▲ TRPA EIP Application Package

Subtask 6.5: Environmental Project Management and Meetings

Ascent will provide project administration and management activities during the full course of the work. Administration and management will be undertaken primarily by Ascent's Principal-in-Charge (Nanette Hansel), Project Manager (Kelley Kelso, CPESC, QSD/QSP, QISP), and Ascent contracts/accounting staff. Activities related to project safety, quality control, contract and subcontract administration, project accounting, project billing, and maintaining the project administrative record will occur under this task. It will also cover miscellaneous management and administrative activities performed at the direction of the NTPUD and LTBMU.

The primary points of contact for Ascent will be Lumos. The Ascent Project Manager will coordinate schedules, data needs, progress updates, and deliverables through her, or her team, as directed. In cases where it is deemed appropriate, the Ascent Project Manager, or individual Ascent resource staff may coordinate directly with NTPUD or LTBMU. This task assumes that Ascent's Project Manager and Principal-in-Charge will participate in up to 6 coordination meetings, and one IS/ND or IS/MND adoption/project approval meeting before the NTPUD Board of Directors. It is assumed that attendance at a public meeting during the 30-day release of the IS/ND or IS/MND and TRPA project approval meetings are not required. If more meetings are required, a separate scope and cost can be prepared if requested.

Task 7 – Bid Assistance

Under this task, we will provide assistance to NTPUD during the bid process, attend the pre-bid meeting, answer bidder questions, and prepare conformed plans. NTPUD will prepare the construction contract and bid documents, compiling them with technical specifications, drawings, and geotechnical report provided by others for bidding. Addenda during the bid process will be assembled and issued by NTPUD with technical support from Lumos.

Task 8 – Public Outreach Support

Our team will provide technical support to assist the Owner with preparation for and participation in a single public outreach meeting at the Conceptual Design level to obtain public feedback related to the trail reconstruction, realignment, and extension project.

Services shall include the following:

- Prepare 30% level technical exhibits to support public outreach, including conceptual plans for presentation to a general audience.
- Coordinate with the Owner on exhibit content, key messages, and anticipated public questions.
- Review and revise exhibits based on Owner comments.
- Attend one (1) public meeting to provide technical support to the Owner.

Task 9 – Owner Directed Services

Lumos and Associates will be available to complete additional work and/or attend project meetings not otherwise specified in this scope of services and as requested by the client. Lumos shall receive written authorization from the client prior to commencing any work under this task. Work performed under this task will be billed on a time and materials basis in accordance with our current fee schedule.

Task 10 – Reimbursables

Any fees or other associated project costs incurred by Lumos and Associates to obtain copies of previous plans or reports, additional mapping, mileage, permit fees paid by Lumos, or other unforeseen reimbursable expenses will be billed under this task at cost plus 15%. Additional production of plans and specifications as requested by the client will also be billed under this task on a time and materials basis in accordance with our current fee schedule.

Assumptions / Exceptions

Lumos has made the following assumptions in preparation of this proposal:

- Submittal to agencies other than those listed in the scope will not be required.
- This proposal assumes that the Pinedrop Trail Reconstruction and Snow Creek Connector Trail design projects will proceed simultaneously, and be permitted together where feasible for efficiency and reducing duplicated permitting efforts.
- This scope does not include preparation of a drainage report or any other technical reports.
- This proposal assumes that the trail extension will not encroach into the Caltrans ROW. No Caltrans permitting is included in this proposal.
- Scope assumes that the design intent and alignments will be decided upon at the 30% design phase. Changes in design concept or alignment after the 30% design phase may have schedule and fee implications.
- All permitting fees will be paid by NTPUD directly.
- Placer County Encroachment Permit will be submitted by Lumos. CEQA, NEPA, USFS, and TRPA permits will be submitted by Ascent. NTPUD will be responsible for Owners Signatures on all application materials.
- It is assumed that there is sufficient land coverage available for the proposed improvements and a new land coverage analysis to determine existing and allowable coverage will not be required. Lumos will show calculations for the proposed coverage from this project in addition to current coverage table data provided by NTPUD.
- It is our understanding that this project will be reviewed as an Environmental Improvement Program (EIP) project, Coverage analysis will comply with EIP requirements.
- Storm water quality best management practices (BMPs) per TRPA guidelines will be followed. No detention/retention basins, or underground storm drainage systems are proposed.
- It is understood that it is NTPUD preference to avoid trail improvements on private property. Extents of encroachment into private property are unknown at this time and will be verified once the topographic basemap is prepared and design is initiated. Should trail improvements within private property be necessary, Lumos will prepare an addendum to address easement exhibits and legal descriptions.
- We have assumed that the design will not require excavations or grading deeper than five feet. Therefore, no Soils Hydrology application will be required to TRPA. If a Soils Hydrology application is required by TRPA, Lumos can add this scope via addendum.

- Utility extensions or relocations, aside from drainage culverts, are not included in the scope of this proposal.
- Any utility adjustments to finished grade as a result of elevation changes from the trail improvements will be included in the improvement plans.
- Landscape and irrigation design are excluded from this proposal.
- Preparation and submittal of the Tahoe Construction General Permit is removed from this proposal.
- This proposal does not include electrical or site lighting design.
- Design of underground storm drain improvements beyond any required culverts to maintain existing drainage patterns, is excluded from this proposal.
- NTPUD will provide boiler plate general conditions and contract documents for bidding purposes.
- This proposal does not include a structural opinion of probable construction cost related to the prefabricated bridge replacement. However, Lumos can assist with obtaining quotes from prefabricated bridge suppliers upon request.
- Structural site visits during the construction phase to be with the contractor to review construction work related to the prefabricated bridge are excluded from this proposal, but can be included in a subsequent scope for construction services.
- NTPUD will advertise, bid, award and manage the project during construction.
- Construction assistance is not included in this proposal. When the project goes to construction, a separate proposal and task order will be provided for construction phase services, which upon request, can include construction staking, construction inspection, SWPPP QSP services, and/or materials testing.
- Attached project schedule is to be considered tentative. Any schedule deviations will be proactively communicated with NTPUD. Schedule may vary based on receipt of survey mapping files, internal review, and agency permitting review and revision requests.

Fees

The tasks described in the Scope of Work will be completed for the following fees:

Task	Description		T&M Estimate
1	Topographic Survey & Project Basemap	(T&M)	\$34,900
2	Structural Engineering	(T&M)	\$7,500
3	Civil Improvement Plans	(T&M)	\$98,620
4	Design Meetings & Project Management	(T&M)	\$23,905
5	Placer County Encroachment Permit	(T&M)	\$1,520
6	Environmental Documentation	(T&M)	\$117,057
7	Bid Assistance	(T&M)	\$13,700
8	Public Outreach Support	(T&M)	\$1,280
9	Owner Directed Services	(T&M)	\$15,000 limit
10	Reimbursables	(Cost + 15%)	\$2,000 limit
Total			\$315,482

Tasks 1 through 9 will be billed on a time and materials (T&M) basis based on our current fee schedule. Reimbursables under Task 10 will be billed based on actual costs plus 15% up to the limit specified above. This proposal does not include provisions for construction assistance, RFIs,

construction staking, inspection, or materials testing. Lumos and Associates will be happy to amend this proposal as necessary to include any of these services.

If this proposal is acceptable, please execute the attached contract and provisions and return the same to our office. Any additional services requested but not covered by this Scope of Work can be provided by an amendment to this proposal. The attached Standard Provisions of Agreement are a part of this proposal. This proposal is subject to change 30 days after the date of the proposal. This proposal is valid for 60 days and subject to change after that time.

Lumos and Associates, Inc. will send monthly progress billings on this project. The amount of these billings will be based upon the percentage of work completed. The terms are 'Due Upon Receipt' and accounts are past due after 30 days. Accounts over 30 days old will be subject to interest at the rate of 1 ½% per month and such collection action as may be necessary to collect the account. In addition, a "Stop Work Order" may be issued on past due accounts. In this case, no further work will be performed until the account is brought current.

Thank you again for allowing Lumos and Associates to provide you with this proposal. Please do not hesitate to call me if you have questions.

Sincerely,



Presley Cochran, P.E.
Project Manager



Justin Sand
Group Manager

Attachments: Tentative Project Schedule

Cc: Michael Craven, Eric Hutchens



Lake Tahoe
312 Dorla Court, Suite 202 | PO Box 890
Zephyr Cove, Nevada 89448
775.588.6490

March 30, 2026

Via email: nchorey@ntpud.org

EXHIBIT A

Mr. Nathan Chorey
North Tahoe Public Utility District
875 National Ave.
Tahoe Vista, CA 96148

***Subject: NTPUD Snow Creek Connector Trail Design
Proposal for Engineering Services (LA26.039)***

Dear Mr. Chorey:

Lumos and Associates, Inc. (Lumos) is pleased to provide the North Tahoe Public Utility District (NTPUD) with this proposal for engineering and related services for the Snow Creek Connector Trail Design.

Project Understanding

Lumos understands that NTPUD is proposing the construction of a new trail segment, referred to as the Snow Creek Connector Trail, to provide a connection between the North Tahoe Regional Park (NTRP) and the existing Snow Creek Trail. The proposed trail would extend from the current terminus within NTRP, traverse NTPUD property along Donner Road, and ultimately tie into the existing Snow Creek Trail. The connector is anticipated to be approximately 0.5 miles in length, with the final alignment to be determined as part of this project.

The proposed trail improvements will span across multiple parcels, likely both public and private, in Tahoe Vista, California. This trail will require compliance with the California Environmental Quality Act (CEQA).

A Placer County Encroachment permit will be needed for any trail improvements within the County right-of-way (ROW). It is also anticipated that a Tahoe Regional Planning Agency (TRPA) Environmental Improvement Project permit will be required.

Lumos has partnered with Ascent Environmental, Inc. (Ascent) to provide the NTPUD with this proposal for survey, engineering, environmental studies, and related services necessary for the design and regulatory permitting of the Project. Design objectives will include designing the trail segment for conformance with AASHTO Class I Bikeway standards, establishing drainage crossings along the trail alignment where required, and minor trailhead improvements.

We propose the following tasks to assist you with your project:

Project Scope

Task 1 – Topographic Survey and Project Basemap

Record Boundary Survey

Lumos will review available record maps and documents prior to beginning field work. During the field survey portion of this project, existing property corners, section corners and highway reference monuments will be located within the project area. A best fit of the boundary will be made based upon found monuments and record mapping. This task will not include any title verification or research of existing ownership. Ownership will be shown per current county records. There may be areas discovered that could have a material discrepancy in the record to what is found in the field. If this occurs we will present the findings. If the proposed improvements are close to any possible conflicts additional field work and research may be needed and ultimately a Record of Survey may be required. If this happens, we would appreciate the opportunity to provide a proposal for a modification to our scope and fees accordingly. The deliverable for this task will include record boundary delineation within the topographic survey deliverable referenced herein.

Topographic Survey

Lumos will prepare a topographic survey map at 1" = 20' scale with 1 foot contour interval accuracy in accordance with National Map Accuracy Standards for the project area. Existing surface improvements, trees greater than 12" dbh defined by species, striping/pavement markings, and visible surface evidence of utilities will be shown. The area to be mapped predominately follows Donner Road and is shown in Figure 1. The survey corridor will be adjusted to accommodate both trail alternatives as shown by the cyan and red lines in Figure 1.

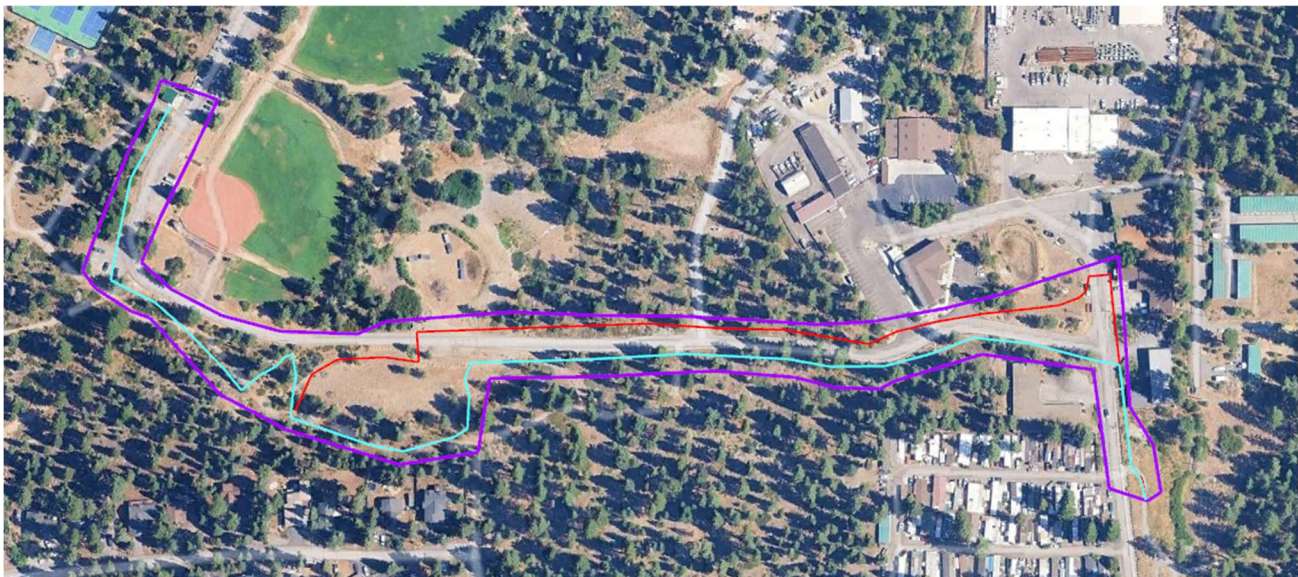


Figure 1: Approximate Survey Limits Shown by the Purple Line, Trail Centerline Alignments Shown by Red and Cyan Lines.

Project datum will be referenced to modified state plane coordinates and NAVD88, consistent with the datum utilized during the 2025 survey efforts at this project site. Deliverables for this task will be a CAD file, including an Autodesk Civil 3D surface with appropriate breaklines.

Survey Schedule

Task 1 can be completed within **6-8** weeks of receipt of all required client provided information and a signed agreement, weather and snow permitting.

The attached draft project schedule assumes that snow along the survey corridor will be melted and survey can begin April 20, 2026.

Proposed fees for Task 1 include Placer County prevailing wage rates paid to all field crew members for time on site.

Task 2 – Civil Improvement Plans

This task will include preparation of civil construction drawings for review by NTPUD, the Tahoe Regional Planning Agency (TRPA), and Placer County (County) for permitting of the project improvements. It is our understanding that NTPUD will act as its own local permitting agency. Our development drawings for the onsite improvements will be prepared on 24"x36" format sheets, at a standard engineering scale, and will include:

- Title Sheet
- Legend, Notes, & Abbreviations
- Sheet Index
- Horizontal Control Plan
- TRPA coverage accounting sheet
- Improvement plan sheets
 - ±0.50 miles of trail, designed to AASHTO Class 1 shared-use bike paths design guidelines, if feasible (some deviations may be required for trail parallel to Donner Road due to its existing slope).
 - Identification of demolition items, tree removals, and utility relocations as necessary
 - One trail entrance developed at the existing snow play area along Donner Road.
 - Dimensions and grading as required for permitting and construction.
 - Property lines (per GIS data or ROW per record map calculations)
 - TRPA Temporary Erosion Control Measures
 - Proposed disturbance calculations
 - Driveway crossings
 - Realignment Sections
 - Coverage Calculations (based on existing coverage table to be provided by NTPUD)
- Details (including standard details, custom details, typical sections, drainage culverts, trail crossings, grading enlargements, detailed cross sections).

A conceptual 30% trail alignment, will be coordinated with NTPUD before beginning the design. Subsequent design coordination submittals will be made to NTPUD at 60%, 90%, and 100%. Deliverables for each phase will be as outlined below:

Conceptual Design (30%) – For Public Outreach & Initiation of CEQA

- Conceptual-level design plans for preliminary review by NTPUD and use in public outreach.
- Conceptual-level Estimate of Probable Construction Cost

Schematic Design Submittal (60%) – For Placer County & TRPA submittals

- Schematic Design level plans, incorporating NTPUD comments from 30% design review and public outreach, to be submitted for TRPA & County permitting.
- Technical Specifications Table of Contents
- Schematic Design-level Estimate of Probable Construction Cost

Bid Documents (90%)

- Bid documents incorporating NTPUD comments from 60% design review and review comments from CEQA, TRPA, and Placer County
- Written response to NTPUD 60% design review comments and permitting agency comments
- Bid Document technical specifications in CSI format
- Bid Document Estimate of Probable Construction Cost
- These plans will be used for acknowledgement of TRPA, Placer County, and CEQA permits to advertise the project for bidding.

Construction Documents (100%)

- Construction level design plans
- These plans will be incorporate final design review comments from NTPUD and address any plan revisions or clarifications that might be required resulting from bidder questions.
- Final technical specifications in CSI format
- Final Engineer's Estimate of Probable Construction Cost

The design schedule will begin once topographic survey files prepared under Task 1 are completed, which will be dependent on seasonal snow melt in spring 2026. From the time the topographic mapping files are completed and Owner's authorization to proceed, we anticipate that we can provide a conceptual layout to NTPUD within **4 weeks**. The 30% Conceptual design will be used for initiation of USFS and CEQA permit submittals.

After the general path alignment and drainage improvement concepts are determined between Lumos and NTPUD and the public outreach meeting, Lumos will provide the 60% design submittal to NTPUD in approximately **6 weeks**, which will be used for the TRPA and Placer County permit submittals.

Once we receive all permitting agency comments on the 60% submittal, we will address those comments and progress the plans to 90% design level in approximately **4 weeks**. The 90% design plans will incorporate all NTPUD and permitting agency review comments.

Once any final NTPUD comments and additional agency comments are received, we will address these comments and finalize the 100% design plans for permit acknowledgment and to advertise the project for bidding approximately **3 weeks**.

Task 3 – Design Meetings & Project Management

Our scope under this task includes Lumos’ participation in meetings and project management. Meetings covered under this task include bi-weekly virtual design coordination meetings with NTPUD (from July 2026 through April 2027), a Conceptual Design (30%) review meeting, a Schematic Design (60%) review meeting, a Design Development Documents (90%) review meeting, Construction Documents (100%) review meeting, and a single site visit after the 30% design submittal to walk the trail alignment with NTPUD staff.

Task 4 – Placer County Encroachment Permit

It is anticipated that Snow Creek Connector Trail will encroach into the Placer County ROW and will require an encroachment permit. Under this task Lumos will submit the following to Placer County for review:

- Encroachment Permit Application
- Site Plan showing: site address; APN number; adjacent road(s) name(s); property owner(s) name(s); property lines and corners; north arrow; dimensions of proposed work; existing features (structures, fences, landscaping); slopes, flow directions and conveyance systems in the right-of-way; proposed permanent Best Management Practices (BMP’s); and edge of pavement of road for width of parcel/property.

Task 5 – Environmental Documentation

Based on preliminary plans (about 30 percent design) prepared by Lumos for the proposed project, Ascent will initiate the required CEQA documentation.

Subtask 5.1: CEQA Documentation (Assumes IS/ND or IS/MND)

Ascent will prepare a draft Initial Study Checklist (IS), which will address all required environmental issues in Appendix G of the State CEQA Guidelines. If it is determined during preparation of the IS that no significant impacts would result from project implementation or that identified significant impacts would be reduced to a less-than-significant level through the application of project resource protection measures, a negative declaration (ND) or a mitigated negative declaration (MND) will be prepared with NTPUD serving as the CEQA lead agency.

5.1a: Administrative Draft IS/ND or IS/MND

Ascent will prepare an administrative draft IS/ND or IS/MND using NTPUD’s preferred format and will verify that the content is consistent with State CEQA Guidelines Section 15071. For each environmental topic, we will include a brief environmental setting, followed by impact analysis with supporting narrative discussion. The administrative record (i.e., references cited in the IS/ND or IS/MND) will also be prepared and submitted to NTPUD in this task.

In addition, conclusions from the field surveys will be synthesized and presented. Mitigation measures may be required to address significant impacts based on established CEQA thresholds. All conclusions will be supported by substantial evidence. Ascent will work with NTPUD to refine any mitigation measures prior to finalizing the administrative draft IS/ND or IS/MND. This scope of work assumes one round of NTPUD review.

5.1b: Public Draft IS/ND or IS/MND and Notice of Intent

After NTPUD's review of the administrative draft IS/ND or IS/MND, Ascent will prepare the public draft IS/ND or IS/MND, which will reflect the final comments from NTPUD staff. Ascent will be responsible for the preparation of all required CEQA notices, transmittals, and electronic filings and the distribution of the ND or MND (Notice of Completion [NOC], Notice of Intent [NOI]). Ascent will arrange for posting the required notices and IS/ND or IS/MND with the State Clearinghouse and Placer County Clerk-Recorder's office. NTPUD will be responsible for any media publications or direct mail/email to responsible and trustee agencies and other interested stakeholders.

5.1c: Final IS/ND or IS/MND, Response to Comments Memorandum, and Mitigation Monitoring and Reporting Program

At the close of the public review period, Ascent will review all comments received on the draft IS/ND or IS/MND and will prepare a memorandum that responds to the comments received. This step is not required by CEQA but is recommended by Ascent to document NTPUD's "consideration" of public and agency comments received, which is required by CEQA. Ascent will also finalize the IS/ND or IS/MND and make any revisions to address comments or provide clarification. It is assumed that no more than 20 comments are received and that they are limited to clarifying questions only. If new analysis is required, a separate scope and fee could be prepared to address the additional analysis.

At the close of the public review period and in combination with preparation of the final IS/ND or IS/MND, Ascent will prepare a draft and final Mitigation Monitoring and Reporting Program (MMRP) for NTPUD adoption.

5.1d: Notice of Determination

Following ND or MND adoption by NTPUD, Ascent will prepare the Notice of Determination (NOD) and submit it electronically to NTPUD for signature. Ascent will arrange for posting at the State Clearinghouse and County Clerk-Recorder's office within 5 days of project approval. It is assumed that NTPUD will provide the fee (\$2,968.75 for an ND or MND in 2025) for the required California Department of Fish and Wildlife filing with the Placer County Clerk-Recorder's office.

5.1e: Assembly Bill 52 Consultation

Assembly Bill (AB) 52 established a consultation process with California Native American tribes for proposed projects in geographic areas that are traditionally and culturally affiliated with that tribe. As the lead agency under CEQA, NTPUD must begin consultation with California Native American tribes traditionally and culturally affiliated with the project area prior to the release of the IS/ND or IS/MND if: (1) the tribe requested in writing to be formally notified of projects in the tribe's traditionally and culturally affiliated area; and (2) the tribe responds, in writing, within 30 days after formal notification from NTPUD requesting consultation (Public Resources Code Section 21080.3.1[b]). NTPUD is required to begin the consultation process within 30 days of receiving a tribe's request (PRC Section 21080.3.1[d-e]).

Ascent may assist NTPUD, if requested, with the AB 52 process by drafting the notification letter to interested Native American tribes for use by NTPUD. For the purposes of this proposal, we assume that no tribes will wish to consult. If any tribe expresses a desire to consult with NTPUD pursuant to

AB 52 and assistance from the Ascent team is requested, an amendment to the scope and budget will be necessary.

Deliverables

- ▲ Administrative Draft IS/ND or IS/MND and administrative record – electronic submittal (MS Word)
- ▲ Public Draft IS/ND or IS/MND for public review – electronic submittal (MS Word and PDF)
- ▲ Notice of Intent
- ▲ Filing of NOI with State Clearinghouse/CEQAnet (performed by NTPUD staff [or delegated to Ascent] with an account with CEQA Submit) and County Clerk-Recorder’s office
- ▲ Distribution of NOI via email to public agencies as determined in consultation with NTPUD.
- ▲ Draft and final memorandum with responses to draft IS/ND or IS/MND comments – electronic submittal (MS Word and PDF)
- ▲ Final IS/ND or IS/MND – electronic submittal (MS Word and PDF)
- ▲ Draft and Final MMRP – electronic submittal (MS Word and PDF)
- ▲ NOD
- ▲ Posting of NOD at County Clerk-Recorder’s office
- ▲ Electronic filing of NOD with State Clearinghouse
- ▲ AB52 Notification Letter

Subtask 5.2 Additional Resource Surveys in Snow Creek Trail Expanded APE

Ascent biologists and cultural resources specialists will conduct surveys within the expanded APE for Snow Creek Trail.

Deliverables

Survey results will be incorporated into the environmental documentation and permits prepared in 2025 Scope of Work

Subtask 5.3: TRPA EIP Permit

Ascent will prepare and assemble a TRPA Environmental Improvement Project (EIP) Review Application Package, which includes a project description, complete application, Initial Environmental Checklist, list of affected parcels, and site plans and BMPs (prepared by Lumos). It is assumed that no excavation deeper than 5 feet would occur triggering a soils hydro permit application. It is also assumed that a land capability district and land coverage application would not be required because bike paths are exempt from coverage requirements per TRPA Code Section 30.4.6.D.3. It is assumed that any coverage accounting that is required will be provided by Lumos. Ascent will submit the material to TRPA via the Accela online system. If it is determined that the whole of the project is qualified exempt under the TRPA-NTPUD MOU, the scope and fee can be amended to reflect the reduced level of effort.

Deliverables

- ▲ TRPA EIP Application Package

Subtask 5.4: Environmental Project Management and Meetings

Ascent will provide project administration and management activities during the full course of the work. Administration and management will be undertaken primarily by Ascent's Principal-in-Charge (Nanette Hansel), Project Manager (Kelley Kelso, CPESC, QSD/QSP, QISP), and Ascent contracts/accounting staff. Activities related to project safety, quality control, contract and subcontract administration, project accounting, project billing, and maintaining the project administrative record will occur under this task. It will also cover miscellaneous management and administrative activities performed at the direction of the NTPUD and LTBMU.

The primary points of contact for Ascent will be Lumos. The Ascent Project Manager will coordinate schedules, data needs, progress updates, and deliverables through her, or her team, as directed. In cases where it is deemed appropriate, the Ascent Project Manager, or individual Ascent resource staff may coordinate directly with NTPUD or LTBMU. This task assumes that Ascent's Project Manager and Principal-in-Charge will participate in up to 6 coordination meetings, and one IS/ND or IS/MND adoption/project approval meeting before the NTPUD Board of Directors. It is assumed that attendance at a public meeting during the 30-day release of the IS/ND or IS/MND and TRPA project approval meetings are not required. If more meetings are required, a separate scope and cost can be prepared if requested.

Task 6 – Bid Assistance

Under this task, we will provide assistance to NTPUD during the bid process, attend the pre-bid meeting, answer bidder questions, and prepare conformed plans. NTPUD will prepare the construction contract and bid documents, compiling them with technical specifications, drawings, and geotechnical report provided by others for bidding. Addenda during the bid process will be assembled and issued by NTPUD with technical support from Lumos.

Task 7 – Public Outreach Support

Lumos shall provide technical support to assist the Owner with preparation for and participation in a single public outreach meeting at the Conceptual Design level to obtain public feedback for the Snow Creek Connector Trail project.

Services shall include the following:

- Prepare 30% level technical exhibits to support public outreach, including conceptual plans for presentation to a general audience.
- Coordinate with the Owner on exhibit content, key messages, and anticipated public questions.
- Review and revise exhibits based on Owner comments.
- Attend one (1) public meeting and provide technical support, including explanation of engineering concepts and responses to technical questions, as requested by the Owner.

Task 8 – Dry Utility Coordination

Dry utility coordination (power, gas, telecommunications, etc.) will need to be evaluated based on the proposed trail segment design and its proximity to existing utilities. Lumos can assist with coordinating with the respective utility providers as needed for any relocations or adjustments required to accommodate the proposed trail infrastructure. No dry utility design is included in this scope.

We anticipate that relocation of Liberty Utilities facilities will be required to accommodate the proposed trail along Donner Rd. We will coordinate this work with Liberty Utilities and assist NTPUD with the application for relocation and/or undergrounding of those facilities under this task. Design of relocated or undergrounded electrical infrastructure will be provided by Liberty Utilities and any associated fees will be paid directly by NTPUD. Relocated facilities will be shown by reference on the civil improvement plans.

Task 9 – Owner Directed Services

Lumos and Associates will be available to complete additional work and/or attend project meetings not otherwise specified in this scope of services and as requested by the client. Lumos shall receive written authorization from the client prior to commencing any work under this task. Work performed under this task will be billed on a time and materials basis in accordance with our current fee schedule.

Task 10 – Reimbursables

Any fees or other associated project costs incurred by Lumos and Associates to obtain copies of previous plans or reports, additional mapping, mileage, permit fees paid by Lumos, or other unforeseen reimbursable expenses will be billed under this task at cost plus 15%. Additional production of plans and specifications as requested by the client will also be billed under this task on a time and materials basis in accordance with our current fee schedule.

Assumptions / Exceptions

Lumos has made the following assumptions in preparation of this proposal:

- Submittal to agencies other than those listed in the scope will not be required.
- This proposal assumes that the Pinedrop Trail Reconstruction and Snow Creek Connector Trail design projects will proceed simultaneously, and be permitted together where feasible for efficiency and reducing duplicated permitting efforts.
- This scope does not include preparation of a drainage report or any other technical reports.
- Structural support, design, and calculations are not anticipated for this project and are excluded from this proposal.
- This proposal assumes that the trail will not encroach into the Caltrans ROW. No Caltrans permitting is included in this proposal.
- Scope assumes that the design intent and alignments will be decided upon at the 30% design phase. Changes in design concept or alignment after the 30% design phase may have schedule and fee implications.
- All permitting fees will be paid by NTPUD directly, including any fees for utility relocation by Liberty Utilities.
- Placer County Encroachment Permit will be submitted by Lumos. CEQA and TRPA permits will be submitted by Ascent. NTPUD will be responsible for Owners Signatures on all application materials. It is assumed that there is sufficient land coverage available for the proposed

improvements and a new land coverage analysis to determine existing and allowable coverage will not be required. Lumos will show calculations for the proposed coverage from this project in addition to current coverage table data provided by NTPUD.

- It is our understanding that this project will be reviewed as an Environmental Improvement Program (EIP) project. Coverage analysis will comply with EIP requirements.
- Storm water quality best management practices (BMPs) per TRPA guidelines will be followed. No detention/retention basins, or underground storm drainage systems are proposed.
- It is understood that it is NTPUD preference to avoid trail improvements on private property. Extents of encroachment into private property are unknown at this time and will be verified once the topographic basemap is prepared and design is initiated. Should trail improvements within private property be necessary, Lumos will prepare an addendum to address easement exhibits and legal descriptions.
- We have assumed that the design will not require excavations or grading deeper than five feet. Therefore, no Soils Hydrology application will be required to TRPA. If a Soils Hydrology application is required by TRPA, Lumos can add this scope via addendum.
- Design of utility extensions or relocations, aside from drainage culverts, are not included in the scope of this proposal.
- Any utility adjustments to finished grade as a result of trail improvements will be included in the improvement plans.
- Landscape and irrigation design are excluded from this proposal.
- Preparation and submittal of the Tahoe Construction General Permit is removed from this proposal. It is assumed the Snow Creek Connector Trail disturbance will be under an acre, however this will need to be verified once topographic survey is completed and design extents are understood.
- This proposal does not include electrical or site lighting design.
- Design of underground storm drain improvements beyond any required culverts to maintain existing drainage patterns, is excluded from this proposal.
- NTPUD will provide boiler plate general conditions and contract documents for bidding purposes.
- NTPUD will advertise, bid, award and manage the project during construction.
- Construction assistance is not included in this proposal. When the project goes to construction, a separate proposal and task order will be provided for construction phase services, which upon request, can include construction staking, construction inspection, SWPPP QSP services, and/or materials testing.
- NTPUD will provide their vesting deeds for parcels owned along Donner Road.
- Placer County Prevailing Wage Rates will be paid to all survey field staff for time spent on site.
- Attached project schedule is to be considered tentative. Any schedule deviations will be proactively communicated with NTPUD. Schedule may vary based on receipt of survey mapping files, internal review, and agency permitting review and revision requests.

Fees

The tasks described in the Scope of Work will be completed for the following fees:

Task	Description		T&M Estimate
1	Topographic Survey & Project Basemap	(T&M)	\$33,600
2	Civil Improvement Plans	(T&M)	\$102,460
3	Design Meetings & Project Management	(T&M)	\$23,905
4	Placer County Encroachment Permit	(T&M)	\$1,520
5	Environmental Documentation	(T&M)	\$62,133
6	Bid Assistance	(T&M)	\$13,700
7	Public Outreach Support	(T&M)	\$1,280
8	Dry Utility Coordination	(T&M)	\$4,000
9	Owner Directed Services	(T&M)	\$15,000 limit
10	Reimbursables	(Cost + 15%)	\$2,000 limit
Total			\$259,598

Task 1 through 9 will be billed on a time and materials (T&M) basis based on our current fee schedule. Reimbursables under Task 9 will be billed based on actual costs plus 15% up to the limit amount specified above. This proposal does not include provisions for construction assistance, RFIs, construction staking, inspection, or materials testing. Lumos and Associates will be happy to amend this proposal as necessary to include any of these services.

If this proposal is acceptable, please execute the attached contract and provisions and return the same to our office. Any additional services requested but not covered by this Scope of Work can be provided by an amendment to this proposal. The attached Standard Provisions of Agreement are a part of this proposal. This proposal is subject to change 30 days after the date of the proposal. This proposal is valid for 60 days and subject to change after that time.

Lumos and Associates, Inc. will send monthly progress billings on this project. The amount of these billings will be based upon the percentage of work completed. The terms are 'Due Upon Receipt' and accounts are past due after 30 days. Accounts over 30 days old will be subject to interest at the rate of 1 1/2% per month and such collection action as may be necessary to collect the account. In addition, a "Stop Work Order" may be issued on past due accounts. In this case, no further work will be performed until the account is brought current.

Thank you again for allowing Lumos and Associates to provide you with this proposal. Please do not hesitate to call me if you have questions.

Sincerely,



Presley Cochran, P.E.
Project Manager



Justin Sand
Group Manager

Attachments: Tentative Project Schedule
Cc: Michael Craven



**NORTH TAHOE
PUBLIC UTILITY DISTRICT**

DATE: April 14, 2026

ITEM: F-6

FROM: Planning and Engineering Department

SUBJECT: Award a Construction Contract and Authorize the General Manager to Execute the Agreement with F.W. Carson Co. for the 2026 Watermain Replacement Project and Find that the Agreement is Exempt from the California Environmental Quality Act (CEQA) Under CEQA Guidelines § 15301 (Existing Facilities)

RECOMMENDATION:

1. Award a construction contract and authorize the General Manager to execute the agreement with F.W. Carson Co. for the 2026 Watermain Replacement Project in the amount of \$1,652,006; and authorize up to 10% of the construction contract, \$165,000 as construction reserves executable by the General Manager.
2. Find that approval of the Agreement is exempt from CEQA as repair, maintenance, and/or minor alterations of existing facilities.

DISCUSSION:

The 2026 Watermain Replacement Project will construct 1,600 linear feet of 8-inch watermain in Commonwealth Drive, Suffolk Place, Chipmunk Street, and Kingswood Village Townhomes in Kings Beach, CA, and 507 linear feet of 8-inch watermain in an undeveloped utility corridor between Old County Road and State Route 28 in Carnelian Bay, CA. The project also includes an intertie with Fulton Water Company, as well as installation of water services, fire hydrants, and pavement restoration. The intertie will provide NTPUD with a second water source in case of emergency, improving system redundancy and water availability.

The 2026 Watermain Replacement Project was designed by NTPUD Engineering Staff. The design was completed in February 2026, and the project was publicly advertised for bids.

Construction Contract:

The project was advertised for bids on March 6 & 13, 2026, and bids were opened on April 2, 2026. The bid results are shown below.

- Bid Period: 3/6/2026 – 4/6/2026
- Bids Received: 5
- Bid Range: \$1,652,006- \$2,797,647 (see table below)
- Engineer’s Construction Estimate: \$2,137,825

Contractor	Bid Amount
F.W. Carson Co.	\$1,652,006
Vinciguerra Construction, Inc.	\$1,795,550
White Rock Construction, Inc.	\$1,798,122
Heavy Equip Inc.	\$1,945,395
Resource Development Company	\$2,797,647

The bids were reviewed by District Staff. F.W. Carson Co. is the lowest responsive bidder at \$1,652,006. F.W. Carson Co. previously completed the 2024 Water Service Line Replacement Project for the District.

Award of this agreement is exempt from CEQA under CEQA Guidelines § 15301 as repairs, maintenance, and minor alterations of existing facilities. Staff has already filed a Notice of Exemption for the project.

Professional Services Contract:

A professional support service has been identified to ensure the successful delivery of the proposed project. This consultant provides industry-specific expertise to facilitate project completion. Staff will still oversee and maintain engagement in project delivery; however, the outside support services proposed allow Staff to additionally focus on other capital projects currently in the design and construction phases.

During construction, Staff’s primary duties are to oversee day-to-day construction activities, ensure the project meets the District’s specifications and objectives, and provide general project management. The specific roles and responsibilities of each consultant are as follows:

Vendor	Role/Responsibility	
NV5, Inc.	Special Inspection – Soil Compaction and Materials Testing	QA/QC

Construction Phase Costs:

The following tables provide a project-level estimate to complete the construction phase of the project. The tables include the capitalization of Staff costs involved in the execution of the project.

Total Construction Phase Costs

F.W. Carson Co.	\$1,652,006	<u>Construction:</u> \$1,817,006 (95.8%)
10% Construction Reserve	\$165,000	
NV5, Inc.	\$19,000	<u>Professional Services</u> \$19,000 (1.0%)
Water Meter and PRV	\$10,000	<u>District Furnished Material:</u> \$10,000 (0.5%)
NTPUD Staff	\$50,000	<u>Staff Time</u> \$50,000 (2.7%)
Total	\$1,896,006	

The total projected construction cost is estimated to be \$1,896,006.

If awarded, the project will begin immediately with the issuance of contracts and review of material submittals from the Contractor. Construction may begin as early as May 1 and in no instance will final completion be later than October 15, 2025.

FISCAL ANALYSIS:

The Fiscal Year (FY) 2025/26 Capital Budget includes \$50,000 and the proposed FY 2026/27 Capital Budget includes \$2,000,000 for the construction of the 2026 Watermain Replacement Project. In the current FY 2025/26 5-year CIP, the 2026 Watermain Replacement Project was listed as Brook and Salmon Drinking Water and Fire Protection Infrastructure Project, but this project has been rescheduled for 2027 because it ranks high for receiving grant funds in the upcoming funding cycle.

The total projected construction cost is estimated to be \$1,896,006. The District has received \$50,000 in grant funding from Placer County Water Agency (PCWA) for the intertie between NTPUD's Dollar Cove Water System and Fulton Water Company to improve system redundancy. The budgetary impact to the District for the proposed project is summarized in the table below:

Item	Amount
Estimated Construction Phase Costs	\$1,896,006
PCWA Grant	(\$50,000)
Total District Commitment	\$1,846,006

The completion of the project will span two Fiscal Years and, depending on the date of mobilization and pace of completion, may require a budget augmentation to FY 2025/26 to allow expenditures originally anticipated for FY 2026/27 to occur in FY 2025/26. Importantly, the District currently has sufficient reserves and cash-flow to fund the construction of the project in FY 2025/26.

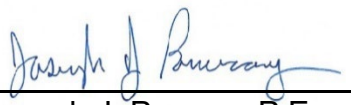
District staff will monitor project expenditures relative to mobilization date and pace of completion and will agendize an FY 2025/26 budget augmentation, likely at the June 2026 meeting, to match the project expenditures, should doing so become necessary.


STRATEGIC PLAN ALIGNMENT:

Goal 1: Provide safe, efficient, sustainable water and wastewater services focusing on industry best practices and continuous improvement – Objective D: Prioritize Capital Project planning and delivery toward uniform service using industry standards, asset condition data, and a focus on climate resilience and emergency preparedness – Tactic 1: Improve the comprehensive fire suppression capability of the water system in all three water systems – Activity a: Replace aging and undersized watermains with new watermains design for fire flow capacity; and – Activity b: Increase the number of installed fire hydrants; and – Activity c: Reduce the spacing between fire hydrants; and – Activity d: Improve watermain looping.

MOTION: Approve Staff Recommendation

REVIEW TRACKING:

Submitted By: 
 Joseph J. Pomroy, P.E.
 Engineering & Operations Manager

Approved By: 
 Bradley A. Johnson, P.E.
 General Manager/CEO

Reviewed By: 
 Patrick Grimes
 Chief Financial Officer



**NORTH TAHOE
PUBLIC UTILITY DISTRICT**

DATE: April 14, 2026

ITEM: F-7

FROM: Planning and Engineering Department

SUBJECT: Award a Construction Contract and Authorize the General Manager to Execute the Agreement with SFT Construction Corp. for the Annex Building Garage and Seismic Improvement Project, and Find that the Agreement is Exempt from the California Environmental Quality Act (CEQA) Under CEQA Guidelines § 15301 (Existing Facilities)

RECOMMENDATION:

1. Award a construction contract, and authorize the General Manager to execute the agreement with SFT Construction Corp. for the Annex Building Garage and Seismic Improvement Project in the amount of \$1,104,480; and authorize up to 10% of the construction contract, \$110,000 as construction reserves executable by the General Manager.
2. Find that approval of the agreement is exempt from CEQA as repair, maintenance, and/or minor alterations of existing facilities.

DISCUSSION:

The Equipment Annex serves as the primary storage facility for rolling stock and emergency response gear, supporting critical emergency response functions.

The Annex Building Garage and Seismic Improvement Project will:

- Enlarge Garage Bays – Demolish and reconstruct the interior retaining wall to lengthen the garage bays to accommodate the new hydro-excavation vehicles.
- Remove Center Garage Door Column – Eliminate the central support column to transition from two garage doors to one large door to improve vehicle access and maneuverability.
- Seismic Retrofit – Complete structural improvements to seismic retrofit the entire Annex building in compliance with the California Existing Building Code (CEBC).
- Roof Replacement – Replace existing roof with a new built-up roof for the entire building, including ice-melt systems, gutters, and downspouts.

The project scope of work and design was developed in conjunction with the Development and Planning Committee over the course of multiple meetings in 2025 and 2026. The project’s design was completed by WY Architects. The design was completed in February 2026, and the project was publicly advertised for bids.

Construction Contract:

The project was advertised for bids on March 6 & March 13, 2026. The bid results are shown below.

- Bid Period: 3/6/2026 – 4/2/2026
- Bids Received: 5
- Base Bid Range: \$1,104,480 to \$1,574,00 (see table below)
- Engineer’s Construction Estimate: \$1,162,441

Contractor	Bid Amount
SFT Construction Corp.	\$1,104,480
ICOR, Inc.	\$1,129,000
GLA – Morris Construction, Inc.	\$1,180,045
Ruppert, Inc.	\$1,265,258
CWS Construction Group, Inc.	\$1,574,000

The bids were reviewed by Staff, and SFT Construction Corp is the lowest responsive bidder at \$1,104,480.

Award of this agreement is exempt from CEQA under CEQA Guidelines § 15301 as repairs, maintenance, and minor alterations of existing facilities. Staff has already filed a Notice of Exemption for the project.

Professional Services Contracts:

A professional support service has been identified to ensure the successful delivery of the proposed project. This consultant provides industry-specific expertise to facilitate project completion. Staff will still oversee and maintain engagement in project delivery; however, the outside support services proposed allow Staff to additionally focus on other capital projects currently in the design and construction phases.

During construction, Staff’s primary duties are to oversee day-to-day construction activities, ensure the project meets the District’s specifications and objectives, and provide general project management. The specific roles and responsibilities of each consultant are as follows:

Vendor	Role/Responsibility	
WY Architects	Architectural and Design Services During Construction	QA/QC
NV5, Inc.	Special Inspection – Soil Compaction and Materials Testing	QA/QC
To Be Determined	Asbestos Abatement	Specialty Services

Construction Phase Costs:

The following table provides an estimate to complete the construction phase of the project. The table includes the capitalization of Staff costs associated with the execution of the project.

Construction Phase Costs

SFT Construction Corp.	\$1,104,480	<u>Construction:</u> \$1,214,480 (89%)
10% Construction Reserves	\$110,000	
WY Architects	\$48,000	<u>Professional Services:</u> \$177,000 (7%)
NV5, Inc.	\$29,000	
Asbestos Coatings Abatement	\$25,000	
NTPUD Staff	\$50,000	<u>Staff Time</u> \$50,000 (4%)
Total:	\$1,366,480	

The total projected construction cost is estimated to be \$1,366,480.

If awarded, the project will begin immediately upon contract issuance and review of the contractor's material submittals. Construction may begin as early as May 1 and in no instance will final completion be later than October 15, 2025.

FISCAL ANALYSIS:

This project is included in the Fiscal Year (FY) 2025/26 Capital Budget for the Base Fund as the Annex Vactor Bay Addition Project with an available budget of \$450,000. WY Architects' total design fee and NTPUD's Staff time through February 2026 total approximately \$150,000. The remaining \$300,000 will be rolled forward to FY 2026/27. Additionally, the proposed FY 2026/27 Capital Budget will include \$1,200,000 for Annex Building Garage and Seismic Improvement Project in the Base Fund. As such,

\$1,500,000 will be available to fund the Annex Building Garage and Seismic Improvement Project. Any unspent funds on the project will be returned to the District reserves.

STRATEGIC PLAN ALIGNMENT:

Goal 4: Sustain and strengthen organizational resources, expertise, and culture – Objective F: Ensure the District's support facilities are well maintained and adequate for all operations – Tactic 3: Continue to adapt workspace needs with changing staff levels and functions.

MOTION: Approve Staff Recommendation

REVIEW TRACKING:

Submitted By:  Approved By: 
Joseph J. Pomroy, P.E. Bradley A. Johnson, P.E.
Engineering & Operations Manager General Manager/CEO

Reviewed By: 
Patrick Grimes
Chief Financial Officer



**NORTH TAHOE
PUBLIC UTILITY DISTRICT**

DATE: April 14, 2026

ITEM: F-8

FROM: Planning and Engineering Department

SUBJECT: Adopt Resolution 2026-03 – Adopting a Sewer System Management Plan

RECOMMENDATION:

Adopt Resolution 2026-03 – a Resolution of the Board of Directors of the North Tahoe Public Utility District adopting a Sewer System Management Plan.

DISCUSSION:

The North Tahoe Public Utility District is required to submit various Federal and State regulatory reports for compliance with drinking water regulations, reporting water use and water loss, documenting sanitary sewer events, and reporting on water rights. There are also a series of comprehensive water and sewer management reports that require updates on a five plus year recurrence. The following list is the comprehensive management reports that all aligned to require updating in 2026.

1. **Sewer System Management Plan (SSMP)** – California (State Water Resources Control Board) – The State Water Board reissued the Statewide Sanitary Sewer Systems General Order in its entirety on June 5, 2023. This Order created a recurring interval for updating and publicly approving the SSMP every six years and a plan audit to be conducted at the mid-point of the update period, year 3. The SSMP was first prepared and adopted in 2010 and was revised and adopted by the Board in 2013. This Board item considers adoption of the new SSMP.
2. **2025 Urban Water Management Plan** – California (Dept Water Resources) – Urban Water Management Plans (UWMPs) are prepared by urban water suppliers every five years. These plans support long-term water resource planning to ensure that adequate water supplies are available to meet existing and future water needs. The District's 2020 Urban Water Management Plan demonstrated our compliance with the 20% water reduction by 2020 and was adopted by the Board in June 2021 along with the Water Shortage Contingency Plan. The schedule is for a Public Hearing in May followed by Board adoption in June.
3. **Risk and Resilience Assessment** – Federal (EPA) – On October 23, 2018, America's Water Infrastructure Act (AWIA) was signed into law. AWIA section 2013, which amended section 1433 of the Safe Drinking Water Act (SDWA), requires community (drinking) water systems (CWSs) serving more than 3,300 people to develop or update risk and resilience assessments (RRAs) and emergency response plans (ERPs) every five years. The RRA analyzes and documents risks to the system from malevolent acts and natural hazards, resilience of the infrastructure including SCADA and

cybersecurity and documents monitoring practices of the utility and other assessments. The Report was first completed in 2021. The RRA report will be completed by June 30, 2026 and is self-certified on the EPA Website.

4. **Emergency Response Plan** – Federal (EPA) – The updated ERP will provide the strategies to facilitate response and recovery following an event, and more specifically, events identified from the RRA. See above for regulatory language. The Report was first completed in 2021. The ERP will be completed by December 31, 2026 and is self-certified on the EPA Website.
5. **Multi-Jurisdictional Hazard Mitigation Plan (MJHMP)** – Federal (FEMA) – Placer County prepares the plan for all County entities every five years. NTPUD will have a section in the plan called an Annex. A hazard mitigation plan is the representation of the jurisdiction's commitment to reduce risks from natural hazards, serving as a guide for decision makers as they commit resources to reducing the effects of natural hazards. Hazard mitigation planning can significantly reduce the physical, financial, and emotional losses caused by disasters. FEMA encourages and rewards local pre-disaster planning by making it a requirement to access certain grant programs. A hazard mitigation plan includes a community risk assessment, community capability assessment, and prioritized mitigation action plan. The Board last adopted the Plan in December 2021. Urban Water Management Plans go back to 2010.

Sewer System Management Plan

The California State Water Resources Control Board (SWRCB) adopted a General Waste Discharge Requirement (WDR or 2006-WDR), Order No. 2006-0003-DWQ, on May 2, 2006 for all publicly owned sanitary sewer collection system utilities in California with more than one mile of sewer pipe. The 2006 WDR included the Monitoring and Reporting Program (2006-MRP), defining spill categories and respective reporting requirements. The 2006 MRP was amended effective September 9, 2013, through Order No. WQ 2013-0058-EXEC (2013 MRP). The WDR is similar in content to the EPA's Capacity, Management, Operation & Maintenance (CMOM) regulation, containing requirements for developing and implementing Sewer System Management Plans (SSMPs). The NTPUD Board of Directors adopted the first SSMP on May 11, 2010.

The SSMP is established to be a usable planning, operations, and procedures document meeting State 2006-WDR and 2013-MRP requirements. The SSMP has been put together following the requirements stated in section D.13 of the 2006 WDR. The State Water Resources Control Board adopted a new General Order for Sanitary Systems on December 6, 2022 with the rule going into effect on June 5, 2023, Order WQ 2022-0102-DWQ.

This Order continues the regulatory coverage of the District's sanitary sewer system. The Order updated the requirements of the Sewer System Management Plan and established new audit and SSMP update recurrence intervals. The District, based on its served population, is required to update and adopt a revised Sewer System Management Plan by May 2, 2026.

FISCAL ANALYSIS:

This item has no fiscal impact.

STRATEGIC PLAN ALIGNMENT:

Goal 1: Provide safe, efficient, sustainable water and wastewater services focusing on industry best practices and continuous improvement. – Objective E: Comply with all regulatory mandates and environmental standards. Tactic 5: Meet all conditions of the Waste Discharge Requirements for Sanitary Sewer System, Order No. 2006-0003-DWQ. – Activity - Maintain a current Sewer System Management Plan and Sanitary Sewer Overflow response procedure.


ATTACHMENTS:

- Resolution 2026-03
- NTPUD Sewer System Management Plan


MOTION:

Approve Staff Recommendation

REVIEW TRACKING:

Submitted By: 

Joseph J. Pomroy, P.E.
Engineering & Operations Manager

Approved By: 

Bradley A. Johnson, P.E.
General Manager/CEO

RESOLUTION 2026-03
A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE NORTH TAHOE PUBLIC UTILITY DISTRICT
ADOPTING A SEWER SYSTEM MANAGEMENT PLAN

WHEREAS, on December 6, 2022, the State Water Resources Control Board Order WQ 2022-0103-DWQ Statewide General Waste Discharge Requirements (WDR) for Sanitary Sewer Systems was adopted and became effective on June 5, 2023; and

WHEREAS, the purpose of the WDR is to develop a regulatory mechanism to provide a consistent statewide approach for reducing sanitary sewer overflows; and

WHEREAS, the WDR requires preparation of a Sewer System Management Plan (SSMP) with certain regulatory elements; and

WHEREAS, the SSMP is one of the required elements for WDR compliance and must be prepared and approved by May 2, 2026; and

WHEREAS, the final SSMP must be approved by the agency's governing board for certification upon its completion.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE NORTH TAHOE PUBLIC UTILITY DISTRICT AS FOLLOWS:

That the Board of Directors of the North Tahoe Public Utility District approves the Sewer System Management Plan, attached to this Resolution as Exhibit A, as required by the State Water Resources Control Board Order WQ 2022-0103-DWQ Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.

PASSED AND ADOPTED THIS 14th DAY OF APRIL 2026, BY THE FOLLOWING ROLL CALL VOTE:

AYES:
NOES:
ABSENT:

Sue Daniels, President
Board of Directors

ATTEST:

Bradley A. Johnson, P.E.
General Manager/CEO

EXHIBIT A

NORTH TAHOE PUBLIC UTILITY DISTRICT

Risk-Based Sewer System Management Plan

LAKE TAHOE BASIN, CALIFORNIA

Adopted: October 8, 2013 (Updated: 9/29/16, 12/1/2022, 4/14/2026)

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Appendix

Appendix A – NTPUD Spill Emergency Response Plan

Appendix B – Key Performance Indicators (KPI)

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Appendix D – State Water Resources Control Board Order WQ 2022-0103-DWQ – Statewide General Waste Discharge Requirements for Sanitary Sewer Systems

ACRONYMS AND ABBREVIATIONS

ABS	Acrylonitrile-Butadiene-Styrene
ACP	Asbestos Cement Pipe
BMP	Best Management Practices
BWPC	Bureau of Water Pollution Control
BWQP	Bureau of Water Quality Planning
CCTV	Closed Circuit Television
CEO	Chief Executive Officer
CI	Cast Iron Pipe
CIP	Capital Improvement Program
CMMS	Computerized Maintenance Management System
CMOM	Federal Capacity, Management, Operation & Maintenance
Corps	U.S. Army Corps of Engineers
DCSID	Douglas County Sewer Improvement District, No. 1
DIP	Ductile Iron Pipe
Districts	Lake Tahoe Basin Wastewater Sewer Districts
EIP	Environmental Improvement Program
EPA	U.S. Environmental Protection Agency
ERP	Emergency Response Plan
FOG	Fats, Oils and Grease

FSE	Food Service Establishments
GIS	Geographical Information System
GM	General Manager
IVGID	Incline Village General Improvement District
KGID	Kingsbury General Improvement District
KPI	Key Performance Indicators
MACP	Manhole Assessment and Certification Program
MOU	Memorandum of Understanding
MRP	Monitoring and Reporting Program
NAC	Nevada Administrative Code
NASSCO	National Association of Sewer Service Companies
NDEP	Nevada Department of Environmental Protection
NTPUD	North Tahoe Public Utility District
OERP	Overflow Emergency Response Plan
OES	Office of Emergency Services
Ordinance	Rules, Regulations, Rates and Charges Governing the Use, Operation, and Management of the District Sewer System Facilities
PACP	Pipeline Assessment and Certification Program
Partnership	Lake Tahoe Basin Wastewater Infrastructure Partnership
PVC	Polyvinyl Chloride Pipe
RHGID	Round Hill General Improvement District
RRA	Risk and Resilience Assessment
RWQCB	Regional Water Quality Control Board
SECAP	System Evaluation and Capacity Assurance Plan
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
STPUD	South Tahoe Public Utility District
SWRCB	California State Water Resources Control Board
Tariff	District's Sewer Service Tariff

TCPUD	Tahoe City Public Utility District
TDD	Tahoe-Douglas District
TMDL	Total Maximum Daily Load
TRPA	Tahoe Regional Planning Agency
TTSA	Tahoe Truckee Sanitation Agency
WDR	Waste Discharge Requirement
WWTP	Wastewater Treatment Plant

INTRODUCTION

BACKGROUND

The Lake Tahoe region has experienced environmental degradation for the past 100 years, most notably in the lake's water clarity and the health of the Tahoe Basin's forest lands. The Lake's water clarity, used as an indicator of water quality, has become the primary measure of the Basin's environmental health. To reverse this degradation, the Environmental Improvement Program (EIP) was initiated in 1997. The EIP is a partnership working to accelerate the attainment of Lake Tahoe's environmental threshold standards through implementing the Regional Plan. Local, state, and federal government agencies, private entities, scientists, and the Washoe Tribe of Nevada and California have collaborated for decades to restore the environmental health of Lake Tahoe.

Restoration of the Lake Tahoe Basin has progressed, in part, through the implementation of the EIP. However, aging sewer infrastructure in the Tahoe Basin also poses potentially serious consequences from sewer overflows or facility failure. In the Lake Tahoe Basin, environmental contamination from the sewer system or pipeline failure would have detrimental ecological, public health, and economic impacts on Lake Tahoe and the surrounding community and could compromise portions of the environmental gains achieved through EIP efforts to date.

The Tahoe Regional Planning Agency (TRPA) is the primary architect of the EIP, with individual project funding provided by the federal government, the States of Nevada and California, local and regional agencies, and private stakeholders.

REGULATORY SETTING, POLICY DEVELOPMENT, AND REQUIREMENTS

The Lake Tahoe Basin includes a complex permitting system with multi-agency and overlapping agency jurisdictions, an active public, a limited project field execution season, and ultimately a limited program implementation horizon.

Background: In 2003, the Army Corps prepared the Lake Tahoe Basin Framework Study Wastewater Collection System Overflow/Release Reduction Evaluation (Overflow/Release Reduction Evaluation), which included a discussion of permitting requirements and regulatory framework at the Federal, State, and local levels as they relate to the repair, rehabilitation, and replacement of wastewater collection system facilities. The purpose of that discussion was to describe the regulatory changes that have occurred since 2003; specifically the departure from the Federal Capacity, Management, Operation & Maintenance (CMOM) regulation which was then being developed by the U.S. Environmental Protection Agency (EPA) toward possible State organized and enforced regulations.

Federal: Although the Federal CMOM regulation is now defunct, many states, including California, have begun developing their own CMOM-type regulations.

California: The California State Water Resources Control Board (SWRCB) adopted a General Waste Discharge Requirement (WDR or 2006-WDR), Order No. 2006-0003-DWQ, on May 2, 2006 for all publicly owned sanitary sewer collection system utilities in California with more than one mile of sewer pipe. The 2006 WDR included the Monitoring and Reporting Program (2006-MRP), defining spill categories and respective reporting requirements. The 2006 MRP was amended effective September 9, 2013, through Order No. WQ 2013-0058-EXEC (2013 MRP). The WDR is similar in content to the EPA's CMOM regulation, containing requirements for developing and implementing Sewer System Management Plans (SSMPs). The SSMP is established to be a usable planning, operations, and procedures document meeting State 2006-WDR and 2013-MRP requirements. The SSMP has been put together following the requirements stated in section D.13 of the 2006 WDR. The State Water Resources Control Board adopted a new General Order for Sanitary Systems on December 6, 2022 with the rule going into effect on June 5, 2023, Order WQ 2022-0102-DWQ. This Order regulates sanitary sewer systems designed to convey sewage. The Order updated the requirements of the Sewer System Management Plan and established new audit and update recurrence intervals.

The General Order re-issuance included these key revisions.

- 1) Clarifies existing prohibition of untreated waste discharge to waters of the State;
- 2) Updates the existing statewide General Order with the implementation of State Water Board regulations and resolutions adopted since the 2006 adoption of the existing Order;
- 3) Provides increased public transparency of sewer spill data, Sewer System Management Plans, and sewer system performance;
- 4) Enhances Regional Water Board enforcement for General Order enrollees failing to reduce sewage spills proactively;
- 5) Addresses sewer system resiliency through proactive planning to:
 - a. Identify system-specific impacts due to climate change, infrastructure age, population growth, and other impacts, and
 - b. Prevent future spills;
- 6) Increases coordination with other utility agencies in the sewer service area;
- 7) Updates monitoring and reporting requirements to address the cost of compliance and data quality assurance;
- 8) Incentivizes system owner employment of certified collection system operators; and

- 9) Expands Order coverage to allow discretionary regulation of privately owned systems, allowing a Regional Water Board to require a privately owned system to obtain coverage under the Order.

AUTHORITY

California: Regulations at the State of California level are addressed in the Lahontan Basin Plan. The Lahontan Basin Plan addresses the need for the Lahontan Regional Water Quality Control Board (RWQCB) to “fully utilize its regulatory authority” to ensure the quality of Lake Tahoe’s sewer systems. The Lahontan RWQCB works to achieve these mandates by implementing TMDL standards, waste discharge permit requirements, and storm water management plans.

Lake Basin: At the regional level, the (Effective February 9, 2013, Amended December 17, 2025) TRPA Ordinance 60.1.6 requires: “Sewage collection, conveyance, and treatment districts shall have sewage spill contingency, prevention, and detection plans approved by the state agency of appropriate jurisdiction and submitted to TRPA for review and approval within three years of the effective date of the Regional Plan.” Per TRPA ordinance 60.1.6.B, the Sewage Spill Plan Criteria shall meet: “Sewage spill contingency, prevention, and detection plans shall comply with the criteria set forth by the state agencies of appropriate jurisdiction and TRPA. Such plans shall include provisions for detecting and eliminating sewage exfiltration and stormwater infiltration from sewer lines and facilities.” The (February 9, 2013) TRPA Regional Plan (chapter 6 – Public Services) Policy PS-3.1 states: “The discharge of municipal or industrial wastewaters to the surface and groundwaters of the Tahoe region is prohibited, except for existing development discharging wastewaters under a state- or TRPA-approved disposal plan.”

This risk-based SSMP addresses the requirements of the TRPA Ordinances and Regional Plan. The District’s SSMP was submitted to TRPA on October 17, 2016. The TRPA code does not require the resubmittal of revised SSMPs.

LAKE TAHOE WASTEWATER INFRASTRUCTURE PARTNERSHIP

The 2003 Overflow/Release Reduction Evaluation recommended that a Basin-wide approach to a comprehensive capital improvement program (CIP) be created to replace or rehabilitate sewer facilities in the Lake Tahoe Basin. In response, the eight sewer districts operating in the Tahoe basin, together with the Army Corps, formed the Wastewater Infrastructure Partnership (LTWIP or Partnership) to develop and implement tools and processes designed to support a programmatic approach to wastewater rehabilitation in the Basin.

The eight districts operating wastewater infrastructure within the Lake Tahoe Basin include:

- South Tahoe Public Utility District (STPUD)
- Tahoe City Public Utility District (TCPUD)

- North Tahoe Public Utility District (NTPUD)
- Incline Village General Improvement District (IVGID)
- Douglas County Sewer Improvement District No.1 (DCSID)
- Kingsbury General Improvement District (KGID)
- Tahoe-Douglas District (TDD)
- Round Hill General Improvement District (RHGID)

DEVELOPMENT OF RISK-BASED SSMPs (LTWIP AND NTPUD DISTRICT SPECIFIC)

Though each has its own distinct service area within the Basin, the LTWIP districts recognize that 1) individual actions by each District affect the Basin as a whole, and 2) there are benefits of collaboration among the districts to maintain the environmental quality of the whole Lake Tahoe Basin. As such, many of the Partnership districts worked collaboratively to prepare a *common framework* for developing individual Risk-Based SSMPs.

The Risk-Based SSMPs will generally be consistent with respective State- and Federally-mandated plans and include a sewer cleaning program, a sewer inspection methodology and frequency, a capital replacement and rehabilitation program, and customer outreach and rate management in accordance with asset management principles and generally accepted industry practice.

The initial SSMP template, prepared through the LTWIP partnership, provided the basic template or *common framework* for the document. This effort was performed by HDR consultants through a contract with the Army Corps. Using this template, the NTPUD (District) filled in and/or compiled necessary information to create the District-specific document. The NTPUD Board of Directors adopted the first SSMP on May 11, 2010.

The initial document, however, not being wholly prepared by NTPUD, inherently created a disconnect whereby certain efficiencies, compiling of information, and/or comprehensions were lacking. On May 31, 2012, the District was subjected to an SWRCB audit and inspection. On August 28, 2012, findings of the 5-31-12 inspection were reported to the District (letter provided in Appendix F). Said findings resulted in a grouped single violation: “failing to develop and implement an SSMP.” Thus action was required by the District to revise the SSMP.

The revision process also triggered the review of other previously developed District emergency response plans to meet other regulatory agencies’ requirements. These emergency response plans required review to appropriately dovetail and/or coordinate the various documents to ensure consistency, understand the multitude of agency requirements, and ensure compliance is

maintained. During the review, it was recognized that the District's Emergency Contingency Plan (ECP) is an outdated document serving the same purpose as the current 2006 WDR D.13 (vi) requirements. This original ECP document was initially developed in 1983 and updated once in 2003. Phone conversations with past District employees noted the original document resulted due to a spill incident in which all the Lake Tahoe Basin Districts recognized it would benefit from a developed "similar and accepted" plan, which was not in place at that time. The ECP was a well thought out document which: solidified the current Mutual Aid Agreement still in effect, compiled available equipment, contact lists, described District operations, etc. As noted, however, this document was outdated, and because all Districts are now governed by the State's current 2006 WDR requirements, the ECP no longer requires maintenance and upkeep. Regardless, all valuable information was gleaned from the ECP, updated as applicable, and is currently provided in the District's Emergency Response Operating Procedure (see SSMP chapter 6).

Recently, Congress passed the America's Water Infrastructure Act of 2018 (AWIA), signed into law by the President on October 23, 2018. The Bioterrorism Act of 2002 is the baseline for AWIA, which amends §1433 of the Safe Drinking Water Act. AWIA has three main requirements for community water systems serving populations greater than 3,300. These systems must conduct a Risk and Resilience Assessment (RRA), revise their ERP, and then certify that both have been completed via a letter to the Environmental Protection Agency (EPA). Each document must now be updated at least every five years. The deadlines for NTPUD are to submit the RRA certification to EPA by June 30, 2021, and then submit the ERP certification to EPA by December 30, 2021. The District made the decision to include the water system and the wastewater system in the RRA and the ERP. Both of these documents are kept on file with the District, are not published, are not subject to the public records act, and will not be included as an appendix to the SSMP. The ECP has been retired.

The new RRA requirements increased emphasis on cyber security as well as natural hazards. Under the Bioterrorism Act 2002, the threat focus was on malevolent acts of terrorism or other intentional threats. It also included language that tampering with a water system is a federal offense, punishable by up to 20 years in prison and up to a \$1 Million fine. The RRA analyzed and documented the following subject matter:

- Risks to the system from malevolent acts and natural hazards
- The resilience of the infrastructure, including SCADA and cybersecurity
- Monitoring practices of the utility
- The financial infrastructure of the utility
- Use, storage, or handling of various chemicals

- Operation and maintenance

Upon completion and certification of the RRA, the District prepared an updated ERP. The updated ERP provided the strategies to facilitate response and recovery following an event. This process also identifies issues, vulnerabilities, and concerns that need to be addressed with future capital projects and new operational strategies. A summary of the key points of the ERP is provided below.

Required Emergency Response Plan Considerations:

- Strategies and resources to improve the system's resilience, including the system's physical security and cybersecurity.
- Plans and procedures that can be implemented. The identification of equipment that can be utilized in the event of a malevolent act or natural hazard that threatens the ability of the community water system to deliver safe drinking water.
- Actions, procedures, and equipment that can prevent or significantly lessen the impact of a malevolent act or natural hazard on the public health and the safety and supply of drinking water provided to communities and individuals, including the development of alternative source water options, relocation of water intakes and construction of flood protection barriers.
- Strategies that can be used to aid in the detection of malevolent acts or natural hazards that threaten the security or resilience of the system.

During the 2016 revision process of the SSMP, a more efficient approach and housing of information was identified to make the document a more user-friendly operations document and eliminate excessive, redundant, and/or potentially conflicting information. The SSMP meets these goals as well as those stated in the 2006-WDR. The SSMP was revised in compliance with the new WDR adopted by the RWQCB on December 6, 2022, Order WQ 2022-0103-DWQ. The SSMP is proposed to be adopted by the NTPUD Board at the April 14, 2026 Board Meeting and submitted by the May 2, 2026 due date.

1.0 SSMP GOALS

The District has made a commitment to properly fund, manage, operate, and maintain all parts of the sewage collection system owned and/or operated by the District. District staff and/or contractors responsible for the operation and maintenance of the sewage collection system will possess the appropriate level of knowledge, skills, and abilities. The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs and mitigate any SSOs that do occur.

The District's goals are to:

- Properly manage, operate, and maintain all parts of the wastewater collection system
- Provide adequate capacity to convey peak flows
- Reinvest in the wastewater infrastructure
- Minimize the frequency of SSOs
- Mitigate impacts of SSOs
- Justify appropriate funding levels to support the program objectives
- Meet all applicable regulatory notification and reporting requirements

2.0 SSMP ORGANIZATION

Per requirements of section D.2 of the 2022 WDR are addressed as follows:

- The NTPUD General Manager (GM)/Chief Executive Officer (CEO) has been designated as the individual with overall responsibility for the implementation of the District’s SSMP.
- The management positions responsible for implementing specific measures of the SSMP are provided in
- Table 2-1.

Table 2-1. District SSMP Authorized Representatives:

District Title	SSMP Element
General Manager/CEO	All
Utility Operations Manager	All
Engineering & Operations Manager	All
O&IT Manager	Map Updates, SCADA
Utility Operations Superintendent	All

Exhibit 2-1 provides the current organization chart for NTPUD. The most up-to-date organization chart for NTPUD may be found at any time at www.ntpud.org. Names and contact information for District personnel are provided in Appendix A – Spill Emergency Response Plan.

In the event of a sanitary sewer overflow (SSO), the District will use the chain of communications shown and outlined in Chapter 6 to initiate response efforts and notify the appropriate agencies. All SSO response activities will be performed in accordance with Chapter 6 of this document.

3.0 LEGAL AUTHORITY

Per requirements of Attachment D.3 of the 2022 WDR are addressed as follows:

Pursuant to the California Public Utilities Code Sections 16461-16489 and NTPUD Ordinances [Ordinances and Policies - North Tahoe Public Utility District](#), the District has the authority to implement the provisions of the SSMP to:

- Prevent illicit discharges into its sanitary sewer system from inflow and infiltration (I&I); unauthorized stormwater; chemical dumping; unauthorized debris; roots; fats, oils, and grease; and trash, including rags and other debris that may cause blockages.
- Collaborate with storm sewer agencies to coordinate emergency spill responses, ensure access to storm sewer systems during spill events, and prevent unintentional cross connections of sanitary sewer infrastructure to storm sewer infrastructure.
- Require that sewer system components and connections be properly designed and constructed.
- Ensure access for maintenance, inspection, and/or repairs for portions of the service lateral owned and/or operated by the Enrollee.
- Enforce any violation of its sewer ordinances, service agreements, or other legally binding procedures; and
- Obtain easement accessibility agreements for locations requiring sewer system operations and maintenance, as applicable.

3.1 RESPONSIBLE PARTY

Applicable ordinances pertinent to the sanitary sewer system for the District are outlined in the District Sewer Ordinance (Ordinance). According to the Ordinance, the GM/CEO is responsible for administering, implementing, and enforcing the provisions outlined in the Ordinance, which are applicable to the sewer system.

3.2 PROVISIONS OF ORDINANCE

All of the requirements and/or prohibitions per WDR 2022 requirements are satisfactorily addressed in the Sewer Ordinance. The District also maintains a Technical Specification that is an attachment to the Ordinance: Technical Specifications, Requirements for Design, Construction, and Maintenance of Customer Owner Sewer and Water Services and Appurtenances. A complete copy of the Sewer Ordinance and Customer Technical Specifications is located on the NTPUD website (www.ntpud.org). [Ordinances and Policies - North Tahoe](#)

Public Utility District

Ownership and Responsibility of Mainline Infrastructure:

Per District Ordinance, the District shall own, operate, and maintain all sewer mains within District boundaries. All sewer main infrastructure is physically located either in the public right of way or District owned easements, thereby ensuring legal access for maintenance, inspection, or repairs. The District has the authority to operate, inspect, repair, maintain and clean District-owned sewer lines and has the right to temporarily suspend sewer service in order to accomplish these tasks.

Ownership and Responsibility of Lateral Infrastructure:

Upper Lateral (building footprint to property line) – Property owner

Lower Lateral (property line to sewer main) – District

Per District Ordinance, the District will repair physically damaged sewer stubs (as defined in Ordinance as being from main to property line – i.e., lower lateral in County right of way). The District is not responsible for any portion of the lateral on private property (i.e., upper lateral). Per District Ordinance, the service lateral (as defined in Ordinance as being from the main to the footprint of the building – i.e., upper and lower lateral) shall be the responsibility of the owner to own and operate in a “free and flowing” condition. The District shall not be responsible for blockages (including root intrusion) in any part of the service lateral *unless* the blockage is caused by a physical defect in the service stub.

Discharge Requirements:

The Ordinance prohibits the discharge of food waste, Fats, Oil and Grease and Sand and Petroleum Based Oils and Grease into the sanitary sewer system. The Ordinance specifically prohibits the discharge of any garbage, fruit, vegetable, animal, or other solid material from any food-processing facility or food-preparing facility, or retail grocery store. In addition, grease traps or grease interceptors are required for all establishments which handle, prepare, cook, or serve food. Sand-oil interceptors shall also be installed to control petroleum oil and sand discharges. The Ordinance also has a section on additional prohibited discharges, Chapter 9.

Construction Requirements:

The materials and manner of construction, and inspection requirements for new and rehabilitated sewer lines are outlined in the Ordinance and Requirements for Design, Construction, and Maintenance of Customer Owner Sewer and Water Services and Appurtenances

4.0 OPERATION AND MAINTENANCE PROGRAM

This element of the SSMP discusses the District’s documented performance measures and activities associated with the preventative maintenance performed on its sanitary sewer system.

Per requirements of Attachment D.4 of the 2022 WDR and as part of best management practices the District:

- Maintains up-to-date maps of its wastewater collection system facilities, showing all gravity line segments and manholes, pumping facilities, pressure pipes, and valves.
- Establishes a routine preventative operation and maintenance schedule and prioritizes higher-frequency inspections and maintenance of known problem areas, including areas with tree root problems. Regular visual and closed-circuit television (CCTV) inspections of manholes and sewer pipes using NASSCO’s Pipeline Assessment and Certification Program and prioritize areas/components prone to root intrusion potentially resulting in sanitary sewer overflows.
- Provide training on a regular basis for its staff in collection system operation, maintenance and monitoring, and require contractors to be appropriately trained. The training shall also include requirements of the 2022 Waste Discharge Requirement General Order, the District’s Spill Emergency Response Plan procedures and practice drills, skilled estimation of spill volume for field operators, and Electronic CIWQS reporting procedures for staff submitting data.
- Maintain an inventory of sewer system equipment that includes critical replacement and spare parts for emergencies and to minimize equipment/facility downtime.

4.1 DESCRIPTION OF EXISTING FACILITIES

The District’s sanitary sewer collection system consists of approximately 74.8 miles of gravity sewer pipe, 6.6 miles of force main, 4746 lower laterals, 1755 manholes, 4 main pumping stations, 14 satellite pumping stations and 2 small grinder pumping stations. The predominant pipe material is asbestos cement, clay, and PVC pipe. Information on the District’s pumping facilities can be found in chapter 8 (table 8.2), with more detailed information on each facility provided in the District’s enterprise asset management software, Lucity, by CentralSquare.

Field Maps: The District has a schematic mapping of all the existing facilities with detailed “swing-tie” location mapping to field locate select facilities where necessary. The maps encompass the complete limits of the District service area. A “map correction” process is in place, allowing maps to be continuously maintained and/or updated as information is generated

in the field. Hardcopies of all field maps are located in all District vehicles for access at any time by crew members.

GIS: The District utilizes ESRI GIS to manage the water and sewer system assets and attributes. The District has connected the GIS attribute (i.e., a graphical illustration of infrastructure) with the District's enterprise asset management software, Lucity (EAM), to provide a graphical interface for maintenance and/or work order activities on all assets.

As-Built Plans: "Sewer Assessment District" (SAD) maps provide construction plan, quality plan sheets (plan/profile) for most of the sewer facilities. In addition to SAD maps, as-built plans of District capital projects are on file. All as-built plans the District has on file are in electronic format (typically PDF) located on the District's computer network.

4.2 PREVENTATIVE OPERATIONS AND MAINTENANCE ACTIVITIES

RESOURCES & FUNDING

As part of the annual budget process, the District's 5-year capital improvement plan is also reviewed and updated. These processes are closely coordinated with the District's Chief Financial Officer (CFO) to maintain alignment with available resources from rates and other funding sources. With purchases, improvements, and funding identified, the staff recommends for Board approval future projects and purchases. Once authorized by the Board, the funds are available for use as required in appropriate fiscal years.

GRAVITY SEWER MAINS

The District's pipeline preventative operation and maintenance program consists of a system-wide cleaning/inspection program on a rotating basis, as well as a more frequent cleaning/inspecting program necessary to target known problem areas. These known problem areas are commonly referred to as the "holiday lines" as they are scheduled to be cleaned multiple times per year and are done in preparation for Lake Tahoe's "Holiday" seasons. The District also maintains a list of root lines that require routine inspection and maintenance to clear sewer mains of roots.

The cleaning/inspection schedule is tracked and documented in the District's enterprise asset management software Lucity. For each cleaning/inspection, crews are required to document their findings in a sewer cleaning log. The cleaning logs are maintained in Lucity. The superintendent reviews the crew's findings to determine whether the cleaning frequency should be modified for any given pipe section.

Mains: Mains that are considered to be in good condition with no history of maintenance-related issues are placed on the system-wide cleaning program. Depending on the condition and pipe

attributes, these pipes are scheduled to be cleaned once every four to eight years. This equates to approximately 9-18 miles of cleaning for these gravity mains per year.

Lower laterals: Lower laterals currently owned by the District are also on a cleaning schedule. Lower laterals are prioritized by respective conditions and/or known problem areas including conditions related to the age of the neighborhood, type of construction, type of use, and existing vegetation. High priority laterals are cleaned and cleared of roots annually.

Manholes: Manhole inspections are performed on a regular basis for condition assessment, hydraulic capability and root intrusion. A problem manhole list is maintained for additional maintenance and cleaning activities.

Pumping and Lift stations

Pumping and lift stations and forcemains are regularly maintained by District staff. All maintenance activities and their associated schedules are maintained in Lucity. The Standard Operating Procedures (SOPs) for routine maintenance of the District's lift stations are provided in Exhibit 4-1.

REHABILITATION AND REPLACEMENT PLAN

Condition Assessment and Inspection

Gravity Pipelines & Manholes

The District uses Closed Circuit Television (CCTV) to assess gravity sewer pipe deficiencies. It has adopted the National Association of Sewer Service Companies (NASSCO) Pipeline Assessment and Certification Program (PACP) standards to perform these assessments and condition grading.

Inspections are scheduled in Lucity and cover the inspection of all gravity mainline and manholes in the District. All gravity mains have been inspected and scored using PACP. Re-inspection with CCTV is scheduled based on condition and need. PACP scoring is used to identify gravity mains in need of replacement, lining, and repair.

Pumping and Lift Stations

As part of the preventative maintenance program, the District's crew assesses the condition of assets within each lift station. Based on these assessments, crews will make recommendations for asset repair, rehabilitation, replacement, or a more formal condition assessment.

The District has been replacing and rehabilitating all the sewer pump and lift stations. The District has fully rehabilitated all four of the main stations (Secline, National, Carnelian, and Dollar), and six satellite pump stations have been replaced. The Capital Plan includes assessing and rehabilitating the remaining 8 satellite pump stations in the next 5 years.

Forcemains

The sewage export system, main pump stations, satellite pump stations and forcemains, were installed between 1968 and 1969. The forcemains were installed with no real way of inspecting the inside of the pipe, as is typical of sewer forcemains. The District takes every opportunity available to verify the internal condition of the forcemains. In the past, the sewage export forcemain was accidentally damaged by contractors working around it. When repairs were made, the forcemain was found to be in good condition. The tar wrap and concrete lining showed little to no wear. It has also been necessary to tap the forcemain due to another project or for repairs. The coupon is recovered from each tap, allowing the District to assess the condition. Coupons show little to no wear on the forcemain.

In the early 1980s, the District undertook the capital project of installing emergency bypass valves along the length of the National and Carnelian force mains. The bypass valves provide an above-ground emergency bypass provision in the event of a failure or accident affecting the use of main. At the time these valves were cut in, the physical condition of the forcemains was good.

Routine maintenance on the forcemains consists of exercising, rebuilding and/or replacing the emergency bypass and the air release valves when needed. Scheduling of services on these assets is based on observed operations noted by the District's Preventative Maintenance (PM) program.

Repair and Replacement Decision Process

Minor repair and replacement decisions for pipes, manholes, and lift stations are made by the Operations group and are scheduled according to priority. Major repair and replacement projects are typically prioritized based on observed deficiencies, failure events, and/or the amount of crew time delegated to the asset. Significant improvements requiring capital funding are reviewed with District management and scheduled within the Capital planning process, as noted below.

CAPITAL PLAN

The District maintains a five-year capital plan reviewed annually to reprioritize and/or adjust as necessary. Capital planning (and prioritizing) projects are done so in consideration of the many drivers as noted below and further described in the District's Capital Improvement Programming Guide:

- Regulatory Compliance
- Conflict with Caltrans/County Improvements
- Condition Assessment (or Probability of Failure)
- Consequences of Failure / Risk
- Capacity / System Operational Efficiencies
- Improved Operations and Maintenance (O&M) Costs

- Safety / Security
- Design Life / Best Replacement Practices
- Redundancy / Reliability
- Expected Standards for Public System
- Opportunity Projects
- Developer Extension

Projects are reviewed, rated, and prioritized each year in coordination with the District's Development and Planning committee. The five-year capital plan is available as part of the District Fiscal Budget.

4.3 TRAINING

The District operates with approximately 23 operators and managerial staff. Typically, staff spend about 55 to 60 percent of their time on the sewer collection system (the remaining 45 to 40 percent on water infrastructure). Several of the District's Operations staff are NASSCO PACP certified for grading the gravity sewer system. A copy of the NASSCO PACP Condition Grading System Code matrix is included in Exhibit 4-2.

In addition, the District uses a combination of in-house classes and on-the-job training to train the wastewater collection system staff. Standard forms, ensuring consistent training topics/direction, have been developed to document on-the-job training sessions. The District also contracts with a consultant to ensure the District maintains compliance with required training topics and intervals.

Training topics include (but are not limited to): OSHA, flagging, equipment, PMs, emergency response, operating documents, SSO response procedures including spill volume estimation, etc. All training courses are tracked and logged in the Lucity asset management database.

4.4 EQUIPMENT AND REPLACEMENT PARTS

A warehouse for replacement parts is tracked and inventoried in the accounting system software Springbrook and in the asset management software. A system is in place whereby when parts are used; the materials are entered into the work order, then tracked and re-ordered on a consistent basis to ensure the parts needed for routine and emergency repairs are always available.

In addition, the Districts within the Tahoe Basin have formed an emergency response partnership, allowing them to better respond to emergencies by combining resources. This includes not only lending labor but also the contingency equipment necessary. As an emergency resource, the copy of the available contingency equipment in this multi-district pool is included in the District's "Spill Emergency Response Plan" document as referenced in Chapter 6:

“Overflow Emergency Response Plan.” Appendix A provides a copy of the “Spill Emergency Response Plan.”

Exhibit 4-1. Lift Station Routine Maintenance Standard Operating Procedures

Exhibit 4-1 Lift Station Routine Maintenance Standard Operating Procedures

Sewer Main Station: Daily

NMS/CMS/DMS	Inspect all Pumps for Leaks, Bleed Pumps, As Needed.
NMS/CMS/DMS	Visually Inspect Drywell/Wetwell For Abnormalities
NMS/CMS/DMS	Inspect Lead Motor - Heat, Bearing Noise, Amps (Log Lead Pump)
NMS/CMS/DMS	Check Sump Pump Operations
NMS/CMS/DMS	Check Q-Cell Vessel, Electrolyte, etc.
NMS/CMS/DMS	Check Generator Block Heater, Battery Charge (SCADA), etc.
NMS/CMS/DMS	Check/Replace All Non-Operational Lighting In/Out, As Needed
NMS/CMS/DMS	Check/Adjust Bubbler Pressure and Log
NMS/CMS/DMS	Check TVSS Equipment Lights
NMS/CMS/DMS/SMS	Check Pumps for Plugs, Replace As Needed
NMS/CMS/DMS/SMS	Log and Total Pump Run Hours
DMS	Take Sewer C12 Residual And Log
DMS	Check Surge Valve Tank Pressure and Operating Level
SMS	Log Operating Pump Flow
SMS	Check and Log Force Mainline Pressure During Pump Runs
SMS	Check Air Release Valve
NMS/CMS	Check/Adjust Hypo Output (Based On Residual Read At Dollar)
NMS/CMS	Confirm Hypo Pump Output - Use Calibration Tubes, If Needed
NMS/CMS	Inspect Air Pressure Supply System (Primary, Secondary)

Sewer Main Station: Weekly and Bi-Weekly

NMS/CMS/DMS/SMS	Check Generator Battery Electrolyte Levels
NMS/CMS/DMS/SMS	Check Generator Battery Charge - Use Meter & Log
NMS/CMS/DMS/SMS	Clean Station And Dry Well
NMS/CMS/DMS/SMS	Check Oil/Coolant Levels On Generator
NMS/CMS	Take Hypo Delivery
DMS	Verify Fuel Heat Line is On (Cold periods only)
DMS	Verify Gutter Heat Tape is On (Cold periods only)

Sewer Main Station: Monthly, Quarterly, Semi-Annual

NMS/CMS/DMS/SMS	Check All Pump On/Off Levels
NMS/CMS/DMS/SMS	Perform Quarterly Preventative Maintenance Tasks
NMS/CMS/DMS/SMS	Check/Fill Oil/Coolant Levels On Generator And Compressor
NMS/CMS/DMS/SMS	Clean and Dress all Battery Terminals, As Needed
NMS/CMS/DMS/SMS	Meter Test SCADA/UES Batteries
NMS/CMS/DMS/SMS	Alarm Test Station - SCADA and UES
NMS/CMS/DMS/SMS	Check Diesel Tank Level And Inspect For Leaks
NMS/CMS/DMS/SMS	Test Generator (No Load)
DMS/NMS/CMS/SMS	Open Up/Clean All MCC9 & Cabinets (Semi-Annual)
NMS/CMS/DMS/SMS	Exercise All Operational Station Valves
DMS/NMS/CMS	Check/Adjust Cathodic Protection Output
DMS/CMS/NMS	Test Run And Check Control Voltage Of All Pump Q-Cells
DMS/NMS/CMS	Check All Cooling Fans - Operate
NMS/CMS	Calibrate Hypo Pumps Using Calibration Tubes
NMS/CMS	Replace/Rotate Hypo Pump Tubing
NMS/CMS	Check Generator Tank Pumps
NMS/CMS	Test Air Pressure Supply System (Primary, Secondary, Tertiary)
DMS	Check Cathodic System

Sewer Main Station: Yearly

DMS/NMS/CMS	Check Bearing/Seal Temperature - Laser Temperature Reader
DMS/NMS/CMS	Check Operation Of All Shunt-Trip C/B
DMS/NMS/CMS	Check Operation Of Back Flow Devices
DMS/NMS/CMS	Inspect Check Valves For Proper Operation, Rebuild As Needed
DMS/NMS/CMS	Grease All Motor Bearings
DMS/NMS/CMS	Check Motor Connections At The Motor
DMS/NMS/CMS	Check Motor To Pump Alignment - Use Computer, As Needed
DMS/NMS/CMS	Strip And Paint Equipment (As Necessary)
NMS/CMS/DMS/SMS	Inspect And Test All Environmental Controls
NMS/CMS/DMS/SMS	Check All Station Electrical Connections
NMS/CMS/DMS/SMS	Perform Annual Preventative Maintenance Tasks
NMS/CMS/DMS/SMS	Test Generator (Under Load)
NMS/CMS/DMS/SMS	Mega-Ohm Test All Motors
DMS/NMS/CMS/SMS	Bi-Annual Wet Well Cleaning (Semi-Annual)
DMS/NMS/CMS/SMS	Load Test SCADA/UES Batteries
DMS/NMS/CMS/SMS	Remove And Replace Generator - Oil/Coolant (Fleet Mechanic)
DMS/NMS/CMS	Flush/Clean Hypo Tanks (As Needed)

Defect Code Categorization

Code	Code_Desc1	Code_Desc2	Code_Type	DECISIONCODE	CRITICAL	MAJOR	MAJOR POINT REPAIR (MPR)	POINT REPAIR (PR)	LINING POINT REPAIR (LPR)	BEND/SAG	CORROSION	Note
DNF	Deposits	Ingress -Fine	O&M	FALSE	0	0	0	0	0	0	0	
SCP	Surface Damage	Corrosion (metal pipe)	Structural	TRUE	0	1	0	0	0	0	1	
DNGV	Deposits	Ingress - Gravel	O&M	FALSE	0	0	0	0	0	0	0	
DSC	Deposits	Settled - Hard/Compacted	O&M	FALSE	0	0	0	0	0	0	0	
DSF	Deposits	Settled - Fine	O&M	FALSE	0	0	0	0	0	0	0	
DSGV	Deposits	Settled - Gravel	O&M	FALSE	0	0	0	0	0	0	0	
DSZ	Deposits	Settled - Other	O&M	FALSE	0	0	0	0	0	0	0	
DV	Deformed	Vertically (brick)	Structural	TRUE	1	1	1	1	1	0	0	
FC	Fracture	Circumferential	Structural	TRUE	0	1	0	0	0	0	0	
FL	Fracture	Longitudinal	Structural	TRUE	0	1	0	0	0	0	0	
FM	Fracture	Multiple	Structural	TRUE	0	1	0	0	0	0	0	
FS	Fracture	Spiral	Structural	TRUE	0	1	0	0	0	0	0	
H	Hole		Structural	TRUE	1	1	1	1	1	0	0	
HSV	Hole	Soil Visible - Beyond Defect	Structural	TRUE	1	1	1	1	1	0	0	
HW	Hole	Void Visible - Beyond Defect	Structural	TRUE	1	1	1	1	1	0	0	
ID	Infiltration	Dripper	O&M	FALSE	0	0	0	0	0	0	0	
IG	Infiltration	Gusher	O&M	TRUE	1	1	1	1	1	0	0	
IR	Infiltration	Runner	O&M	TRUE	0	0	0	1	0	0	0	
ISGT	Intruding Seal Material	Grout	Construction	FALSE	0	0	0	0	0	0	0	
ISSRB	Intruding Seal Material	Sealing Ring - Broken	Construction	TRUE	0	0	0	1	0	0	0	
ISSRH	Intruding Seal Material	Sealing Ring - Hanging	Construction	TRUE	0	0	0	1	0	0	0	
ISZ	Intruding Seal Material	Other	Construction	FALSE	0	0	0	0	0	0	0	
IW	Infiltration	Weeper	O&M	FALSE	0	0	0	0	0	0	0	
JAL	Joint	Angular - Large	Structural	TRUE	0	1	1	1	0	0	0	
JAM	Joint	Angular - Medium	Structural	TRUE	0	0	0	1	1	0	0	
JB	AccessPoint	Junction Box	Construction	FALSE	0	0	0	0	0	0	0	
JOL	Joint	Offset - Large	Structural	TRUE	0	1	1	1	1	0	0	
JOM	Joint	Offset - Medium	Structural	TRUE	0	0	0	1	1	0	0	
JS	Joint	Separated (Open)	Structural	TRUE	0	1	1	1	1	0	0	
JSM	Joint	Separate - Medium	Structural	TRUE	0	1	1	1	1	0	0	
LD	Line	Down	Construction	FALSE	0	0	0	0	0	0	0	
LFAC	Lining Failure	Abandoned Connection	Structural	FALSE	0	0	0	0	0	0	0	
LFB	Lining Failure	Blistered Lining	Structural	FALSE	0	0	0	0	0	0	0	
LFBK	Lining Failure	Buckled Lining	Structural	TRUE	0	1	1	1	0	0	0	
LFCS	Lining Failure	Service Cut Shifted	Structural	TRUE	0	1	1	1	0	0	0	
LFD	Lining Failure	Detached Lining	Structural	FALSE	0	0	0	0	0	0	0	
LFDE	Lining Failure	Defective End	Structural	TRUE	0	1	1	1	0	0	0	
LFOC	Lining Failure	Overcut Service	Structural	TRUE	0	0	0	1	0	0	0	
LFUC	Lining Failure	Undercut Service	Structural	TRUE	0	0	0	1	0	0	0	
LFW	Lining Failure	Wrinkled Lining	Structural	FALSE	0	0	0	0	0	0	0	
LFZ	Lining Failure	Other	Structural	TRUE	0	0	0	1	0	0	0	
LL	Line	Left	Construction	FALSE	0	0	0	0	0	0	0	
LLD	Line	Left & Down	Construction	FALSE	0	0	0	0	0	0	0	
LLR	Line	Left & Right	Construction	FALSE	0	0	0	0	0	0	0	
LLU	Line	Left & Up	Construction	FALSE	0	0	0	0	0	0	0	
LR	Line	Right	Construction	FALSE	0	0	0	0	0	0	0	

5.0 DESIGN AND PERFORMANCE PROVISIONS

Proper design and installation of sewer system pipelines, pump stations, and appurtenances are one of the most important aspects of maintaining a functioning, long-lasting sewer system. A properly designed and installed sewer system can minimize system deficiencies that could cause or contribute to future overflows and reduce operation, maintenance, and renewal requirements.

Per requirements of section D.5 of the 2022 WDR, and as part of best management practices, the District maintains:

- Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations, and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems.
- Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

5.1 DISTRICT'S DESIGN AND CONSTRUCTION STANDARDS

The District's design criteria for constructing new and rehabilitated sewer lines and appurtenances are included in the District's Ordinance attachment: 'Customer Owned Technical Specifications - Requirements For Design, Construction, And Maintenance Of Customer Owned Sewer & Water Services & Appurtenances.' It also includes the District standard details. These documents are available at the District Office and on the District's website: [Ordinances and Policies - North Tahoe Public Utility District](#) and www.ntpud.org.

The District's design and construction standards are used by the District staff and are provided to consulting engineers, contractors and/or developers at the start of a design process or proposed development.

5.2 INSPECTION AND TESTING PROGRAM

The inspection and testing requirements are specified in the District's Sewer Ordinance, the 'Requirements For Design, Construction, And Maintenance Of Customer Owned Sewer & Water Services & Appurtenances Testing' and the current edition of the California Plumbing Code is required for all assets owned by the District, as well as those connected to the system. The complete details of test parameters and requirements are also provided in the District's bid documents and technical specifications for Public Works Projects. The following is a brief definition as to the type of testing required per asset type.

Service laterals: Air or Water test (per District ordinance, standard details, and tech. specs.), Bedding/Backfill inspection (per District ordinance)

Gravity mains: Air testing (per District tech. specs.), TV final (per District tech. specs.), Mandrel test (per District specs.), bedding & pipe zone inspection (per capital project bid specs.), and backfill (per county encroachment permit).

Manholes: Water or Vacuum test (per District tech. specs.)

Forcemains: Pressure test (per District tech. specs.)

Pump Stations: Pump tests (factory and site) (per capital project bid specs.), Construction management and inspections (per District tech specs)

6.0 SPILL EMERGENCY RESPONSE PLAN

This chapter briefly describes the District’s sanitary sewer Spill Emergency Response Plan (SERP). Elements outlined in this plan note State requirements and how the District is meeting said criteria. The District has prepared a Spill Emergency Response Plan (Formerly the “SSO Emergency Response Operating Procedures” binder).

The Spill Emergency Response Plan:

- Required by State Water Resources Control Board, Statewide Waste Discharge Requirements, General Order For Sanitary Sewer Systems, Order WQ 2022-0103-DWQ
- Satisfies Requirements Of Sewer System Management Plan (SSMP), Chapter 6
- It is included in Appendix A

Per requirements of section D.6 of the 2022 WDR, and as part of best management practices, the District’s Spill Emergency Response Plan includes procedures to:

- Notify primary responders, appropriate local officials, and appropriate regulatory agencies of a spill in a timely manner.
- Notify other potentially affected entities (for example, health agencies, water suppliers, etc.) of spills that potentially affect public health or reach waters of the State.
- Comply with the notification, monitoring and reporting requirements of this General Order, State law and regulations, and applicable Regional Water Board Orders.
- Ensure that appropriate staff and contractors implement the Spill Emergency Response Plan and are appropriately trained.
- Address emergency system operations, traffic control and other necessary response activities.
- Contain a spill and prevent/minimize discharge to waters of the State or any drainage conveyance system.
- Minimize and remediate public health impacts and adverse impacts on beneficial uses of waters of the State.
- Remove sewage from the drainage conveyance system.
- Clean the spill area and drainage conveyance system in a manner that does not inadvertently impact beneficial uses in the receiving waters.
- Implement technologies, practices, equipment, and interagency coordination to expedite spill containment and recovery.

- Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event.
- Conduct post-spill assessments of spill response activities.
- Document and report spill events as required in this General Order; and
- Annually, review and assess effectiveness of the Spill Emergency Response Plan, and update the Plan as needed.

CALIFORNIA-SPECIFIC NOTIFICATION, MONITORING AND REPORTING REQUIREMENTS

All sanitary sewer overflows that occur in California as a result of a failure within the District’s sanitary sewer system are subject to applicable notification and reporting requirements as stated in SWRCB Order No. WQ 2022-0103. Notification, monitoring and reporting are the responsibility of the District. The following tables are a summary of the sewer spill categories, the notification, monitoring, and reporting requirements.

ATTACHMENT E2 – SUMMARY OF NOTIFICATION, MONITORING AND REPORTING REQUIREMENTS

This Attachment provides a summary of notification, monitoring and reporting requirements, by spill category, and for Enrollee-owned and/or operated laterals as required in Attachment E1 of this General Order, for quick reference purposes only.

Table E2-1

Spill Category 1: Spills to Surface Waters

Spill Requirement	Due	Method
Notification	<p>Within two (2) hours of the Enrollee’s knowledge of a Category 1 spill of 1,000 gallons or greater, discharging or threatening to discharge to surface waters:</p> <p>Notify the California Office of Emergency Services and obtain a notification control number.</p>	<p>California Office of Emergency Services at: (800) 852-7550</p> <p>(Section 1 of Attachment E1)</p>
Monitoring	<ul style="list-style-type: none"> • Conduct spill-specific monitoring; • Conduct water quality sampling of the receiving water within 18 hours of initial knowledge of spill of 50,000 gallons or greater to surface waters. 	<p>(Section 2 of Attachment E1)</p>
Reporting	<ul style="list-style-type: none"> • Submit Draft Spill Report within three (3) business days of the Enrollee’s knowledge of the spill; • Submit Certified Spill Report within 15 calendar days of the spill end date; • Submit Technical Report within 45 calendar days after the spill end date for a Category 1 spill in which 50,000 gallons or greater discharged to surface waters; and • Submit Amended Spill Report within 90 calendar days after the spill end date. 	<p>(Section 3.1 of Attachment E1)</p>

Table E2-2

Spill Category 2: Spills of 1,000 Gallons or Greater That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	<p>Within two (2) hours of the Enrollee’s knowledge of a Category 2 spill of 1,000 gallons or greater, discharging or threatening to discharge to waters of the State:</p> <p>Notify California Office of Emergency Services and obtain a notification control number.</p>	<p>California Office of Emergency Services at: (800) 852-7550</p> <p>(Section 1 of Attachment E1)</p>
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> • Submit Draft Spill Report within three (3) business days of the Enrollee’s knowledge of the spill; • Submit Certified Spill Report within 15 calendar days of the spill end date; and • Submit Amended Spill Report within 90 calendar days after the spill end date. 	(Section 3.2 of Attachment E1)

Table E2-3

Spill Category 3: Spills of Equal or Greater than 50 Gallons and Less than 1,000 Gallons That Does Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	Not Applicable	Not Applicable
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> • Submit monthly Certified Spill Report to the online CIWQS Sanitary Sewer System Database within 30 calendars days after the end of the month in which the spills occur; and • Submit Amended Spill Reports within 90 calendar days after the Certified Spill Report due date. 	(Section 3.3 and 3.5 of Attachment E1)

Table E2-4

Spill Category 4: Spills Less Than 50 Gallons That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	Not Applicable	Not Applicable
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> • If, during any calendar month, Category 4 spills occur, certify monthly, the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills into the online CIWQS Sanitary Sewer System Database, within 30 days after the end of the calendar month in which the spills occurred. • Upload and certify a report, in an acceptable digital format, of all Category 4 spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur. 	(Section 3.4, 3.6, 3.7 and 4.4 of Attachment E1)

Table E2-5

Enrollee Owned and/or Operated Lateral Spills That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	<p>Within two (2) hours of the Enrollee’s knowledge of a spill of 1,000 gallons or greater, from an enrollee-owned and/or operated lateral, discharging or threatening to discharge to waters of the State:</p> <p>Notify California Office of Emergency Services and obtain a notification control number.</p> <p>Not applicable to a spill of less than 1,000 gallons.</p>	<p>California Office of Emergency Services at: (800) 852-7550</p> <p>(Section 1 of Attachment E1)</p>
Monitoring	Conduct visual monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> • Upload and certify a report, in an acceptable digital format, of all lateral spills (that do not discharge to a surface water) to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur. • Report a lateral spill of any volume that discharges to a surface water as a Category 1 spill. 	(Sections 3.6, 3.7 and 4.4 of Attachment E1)

DISTRICT SPILL EMERGENCY RESPONSE PLAN

The District's Spill Emergency Response Plan is included as Appendix A. As every sanitary sewer overflow (SSO) event is different and is always time critical, the Spill Emergency Response Plan is designed as a simple, indexed, to the point, outline to use during any SSO event scenario. Included in the binder is:

- Contact information
- Bullet point SOPs
- Flowchart SOPs
- Detailed SOPs
- Notification/Reporting Requirements
- Documentation forms
- Volume estimation
- Available equipment
- Emergency Maps
- Water Quality Monitoring
- Etc.

The combined product provides direction whereby, if followed and using the appropriate forms, all requirements regarding correct response, reporting, and documentation of the event are met.

This binder will assist the District personnel in determining the type of SSO, safely stopping/rerouting the flow, cleaning up the SSO, and collecting all the needed information for notification and/or reporting purposes.

Specific measures taken for clean-up response and sewer intrusion into a private residence are described in the following subsections.

Clean Up Response

Once District personnel are notified of the SSO, the following steps are completed:

1) Containment of flow; 2) Pump around blockage; 3) Clean-up spill; 4) Prepare report.

If further repair is required, additional steps will be taken as appropriate.

These can include:

- Regulate upstream flows
- Install bypass pumps and piping (as required)
- Water shut off
- Tankers or Vacuum Trucks
- Excavation
- Repairs
- Resume normal pumping
- Monitor system
- Determine cause
- Restore operation

Sewer Intrusion into a Private Residence

As discussed in Section 3 of this document, the District is neither responsible nor liable for private laterals. The District's response to a private residence spill is to verify that the sewer main is open and free-flowing and/or if the SSO is caused due to a problem within the District's responsibility. If District personnel confirm the spill is caused due to an issue outside District responsibilities, the District notifies Placer County Environmental Health that the situation exists and attempts to notify the property owner of the problem.

If the property owner cannot obtain appropriate service from a private sector provider, the District has a form that can be completed by the owner, which authorizes the District to perform clean-up activities, with the expenses billed directly to the property owner. This form is provided in the District's Spill Emergency Response Plan. If the property owner cannot be reached for authorization of clean-up, a directive from the Placer County Environmental Health Department may be substituted, granted that the owner is still liable for the spill and clean-up activities. Without the directive from Placer County, the District is not to provide plumbing or clean-up services. In all cases involving an actively flowing spill, a water shutoff to the parcel will be performed immediately.

Per the California Statewide adoption of the 2022 WDR, private lateral spills may be voluntarily reported to the State or inform the responsible party that State law requires such notification to the Office of Emergency Services by any person that causes or allows a sewage discharge to waters of the State

SPILL EMERGENCY RESPONSE TRAINING

The District uses a combination of in-house classes, outside training exercises, outside instructors, on-the-job training, and State certified certifications to train its wastewater collection system staff. Standard forms, ensuring consistent training topics/direction, have been developed to document on-the-job training sessions. Training topics include (but are not limited to): OSHA, flagging, equipment uses, infrastructure use, PMs, emergency response, operating documents, etc. SSMP, SSO response, SSO estimating, etc., are part of the District's scheduled training sessions. All training courses are tracked and logged in the Lucity asset management database.

7.0 SEWER PIPE BLOCKAGE CONTROL PROGRAM

Fats, Oils, Grease (FOG), rags and debris are discharged to sanitary sewer systems by residential users, food handling facilities, and other commercial and industrial establishments. Commonly these materials can cause pipe blockages leading to sanitary sewer overflows (SSOs). To control FOG, rages and debris, and meet the requirements of section D.7 of the 2022 WDR, the District has established a FOG Control Program and Stop the Clog program, which includes:

- An implementation plan and schedule for a public education and outreach program that promotes proper disposal of pipe-blocking substances.
- A plan and schedule for the disposal of pipe-blocking substances generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of substances generated within a sanitary sewer system service area.
- The legal authority to prohibit discharges to the system and identify measures to prevent spills and blockages.
- Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, best management practices requirements, recordkeeping and reporting requirements.
- Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the fats, oils, and grease ordinance.
- An identification of sanitary sewer system sections subject to fats, oils, and grease blockages and establishment of a cleaning schedule for each section; and
- Implementation of source control measures for all sources of fats, oils, and grease reaching the sanitary sewer system for each section identified above.

7.1 NATURE AND EXTENT OF FOG PROBLEM

The District currently has approximately 46 active commercial sources of grease discharging into the sewer collection system. In 2006 the District implemented a FOG control program, and the quantity of FOG that is introduced to the system has been significantly reduced. The District also has a program targeting rags and debris. Pump station wet well cleaning schedules have been reduced from monthly to quarterly to bi-annual. Staff contribute most of this FOG reduction to:

- Grease Trap/Interceptor requirements on all restaurant remodels or change of business licenses
- Grease Interceptor requirements on all new Food Service Establishments
- Public Outreach Program

7.2 FOG CONTROL PROGRAM

The District's FOG Control Program includes four elements: Legal Authority, Commercial FOG Source Control, Preventative Maintenance, and Public Outreach.

Legal Authority

The District is responsible for minimizing the amount of FOG that enters the sanitary sewer systems from residential, commercial, and industrial sources. The District's Sewer Ordinance requires all non-residential establishments which handle, prepare, cook, or serve foods or, in the opinion of the District's manager, is necessary for the handling of waste that can affect the functioning of the sewer system. All gravity grease interceptors shall comply with the Technical Specifications, be maintained in good working order, and be supported by maintenance records and proper operation. Records shall be provided to the District upon request. The District accepts the design, sizing, and construction standards for all pretreatment facilities based on the most recent edition of the California Plumbing Code.

In addition, no mechanical or waste grinders may be connected to the wastewater collection system by Food Service Establishments (FSEs).

Commercial FOG Source Control

Identification and Education of Food Service Establishments: Currently, there are 47 active Food Service Establishments (FSEs) in the District's service area. Six (6) of these FSEs are currently exempt from installing and maintaining a grease removal device as their facility is not FOG producing. A list of current FSEs, with details on the establishment, is maintained in Lucity and is shown in Exhibit 7.1.

The District has developed and distributed a binder to FSEs to encourage FSEs to follow best management practices to minimize grease entering the sewer system. This binder includes a quick guide for BMP's, a pertinent section of the District's Sewer Ordinance, local grease hauler, and rendering companies' information and example log forms. The District distributes this binder to each FSE when they are established and likewise provides additional copies if the original was misplaced by a previous owner or manager.

Inspection and Enforcement Program: The District conducts periodic inspections to ensure grease removal equipment is properly installed and maintained. The District aims to inspect each FSE once per year. The District is working on implementing the "FOG module" in the Lucity system to maintain accurate asset information and inspection results. Inspections consist of both internal and external processes. Each is addressed below:

Internal: During inspections, District compliance personnel confirm FSE characteristics and fixtures, review maintenance documentation, measure grease and sludge accumulations, and fill out an inspection form detailing the inspection findings.

External: CCTV of FSE's sewer lateral.

If an FSE is not in compliance with the sewer ordinance, the FSE owner is presented with the results of the above inspections, thereby supporting a failed inspection. The FSE will be issued a correction notice to remedy the failed inspection. If the remedy is not implemented, violations will be assessed in accordance with the Sewer Ordinance, Chapter 10, Penalties, and Enforcement. Non-compliance may also result in a correction notice requiring a grease interceptor's installation.

FOG Disposal:

The District has concluded that there is adequate local capacity to dispose of grease from commercial sources within the District at this time. According to local regulations, small grease traps can typically be self-cleaned by the business with proper disposal of the grease trap waste in the waste stream. For larger businesses and restaurants with grease interceptors, there are multiple businesses that perform grease interceptor pumping and maintenance.

Preventative Maintenance

In addition to source control, the District also focuses on sewer cleaning activities in areas of known FOG sources through the "holiday line" cleaning program. This effort aims to prevent FOG accumulation from blocking the flow of wastewater and potentially causing a sanitary sewer overflow.

The District also leverages maintenance findings from cleaning, CCTV, or pump station maintenance. If maintenance crews identify an abnormally fast FOG accumulation rate in the pipe or wet well, they will notify their manager of the condition. Through this information exchange, an ad-hoc FOG source investigation may be conducted in an attempt to determine why increased FOG accumulation rates are occurring.

Public Outreach

The District has a FOG and Rags and Debris public education outreach program that promotes proper disposal of FOG and Rags and Debris. This program has the following primary components:

1. Public Education – The District believes that public education regarding the impacts of FOG on the collection system is an important aspect of the FOG Control Program. The District also has two campaigns to address rags and debris; Your Toilet is Not a Trash Can and Remember: Wipes Clog Pipes. The District has distributed pamphlets to

residential and commercial customers, placed information on the website, utilized social media, included it in newsletters and annual reports, and communicated through information booths at local events such as SnowFest, Music at the Beach, Ice Cream in the Park, and Earth Day.

2. Residential FOG Source Control - The District has developed a residential source control program called “Can the Grease.” The goal of this program is to reduce the amount of residential FOG that enters the system. The District distributes free containers with disposable liners where FOG can be disposed of and placed in the customer’s standard trash receptacle.

Exhibit 7-1. Food Service Establishments – See EAM (Lucity)

Facility Number	Facility Name	Classification	Address	Street Name	City	General Location	Interceptor Type
117-200-054	Spindleshanks		400	Brassie	Tahoe Vista	400 Brassie	Gravity Interceptor
116-050-039	Agate Bay Swim Club		453	Agate	Carnelian Bay	453 AGATE	Exempt
115-050-029	Gar Woods	Restaurant	5000	North Lake	Carnelian Bay	5000 North Lake Blvd	Gravity Interceptor
115-030-058-001	7-Eleven Carnelian Bay	Miscellaneous Food	5075	North Lake	Carnelian Bay	5075 North Lake Blvd	Exempt
115-030-058	CB's Pizza		5075	North Lake	Carnelian Bay	5075 North Lake Blvd	Hydromechanical Interceptor
115-030-052	Watermans Landing Café		5166	North Lake	Carnelian Bay	5166 North Lake Blvd	Gravity Interceptor
115-030-026	Old Post Office	Restaurant	5245	North Lake	Carnelian Bay	5245 North Lake Blvd	Hydromechanical Interceptor
117-071-006	Cedar Glen Lodge	Restaurant	6589	North Lake	Tahoe Vista	6589 North Lake Blvd	Gravity Interceptor
117-071-015	Boulevard Café		6731	North Lake	Tahoe Vista	6731 North Lake Blvd	
117-071-028	Mourelatos Ice Cream Shop		6835	North Lake	Tahoe Vista	6835 North Lake Blvd	
117-071-030-001	Pep's Place	Restaurant	6883	North Lake	Tahoe Vista	6883 North Lake Blvd	Hydromechanical Interceptor
117-080-066	Martis Camp Club		6920	North Lake	Tahoe Vista	6920 North Lake Blvd	
117-100-086	N. Tahoe Hebrew Congregation		7000	Latone	Tahoe Vista	7000 Latone	
117-100-022	Jiffy's Pizza	Restaurant	7019	North Lake	Tahoe Vista	7019 North Lake Blvd	Hydromechanical Interceptor
117-100-026	Old Range Steakhouse	Restaurant	7081	North Lake	Tahoe Vista	7081 North Lake Blvd	Gravity Interceptor
117-110-072	Ritz Lakeside	Restaurant	7170	North Lake	Tahoe Vista	7170 North Lake Blvd	Gravity Interceptor
117-110-070	Captain Jon's	Restaurant	7220	North Lake	Tahoe Vista	7220 North Lake Blvd	Hydromechanical Interceptor
117-110-060	Wild Goose	Restaurant	7320	North Lake	Tahoe Vista	7320 North Lake Blvd	Gravity Interceptor
117-150-039	Lanza's Restaurant	Restaurant	7736	North Lake	Tahoe Vista	7739 North Lake Blvd	Gravity Interceptor
117-160-002	Safeway	Miscellaneous Food	7815	North Lake	Tahoe Vista	East and West sides of store (2	Gravity Interceptor
090-062-002Kings Beach	Kings Beach Elementary	School/Church	8125	Steelhead	Truckee	In kitchen under floor in front of	Hydromechanical Interceptor
090-071-019	Hiro Sushi	Restaurant	8159	North Lake	Kings Beach	8159 North Lake Blvd	Gravity Interceptor
090-072-024	Tree House Cafe	Restaurant	8160	North Lake	Kings Beach	8160 North Lake Blvd	Gravity Interceptor
090-072-029	Java Hut	Coffee Shop	8268	North Lake	Kings Beach	8268 North Lake Blvd	
090-072-030	White Caps Pizza	Restaurant	8290	North Lake	Kings Beach	8290 North Lake Blvd	Gravity Interceptor
090-080-018	North Tahoe Event Center	Miscellaneous Food	8318	North Lake	Tahoe Vista	8318 North Lake Blvd	Gravity Interceptor
090-080-001	Jason's Beachside Grille	Restaurant	8338	North Lake Blvd	Kings Beach	8338 North Lake Blvd	Gravity Interceptor
090-075-018	Las Panchitas		8345	North Lake	Kings Beach	8345 North Lake Blvd	Hydromechanical Interceptor
090-075-014	99 Cent & More Store (Ice Cream Shop)	Restaurant	8393	North Lake	Kings Beach	8393 North Lake Blvd	Hydromechanical Interceptor
090-123-031	Fat Cat Kitchen	Restaurant	8445	North Lake	Kings Beach	8445 North Lake Blvd	
090-123-026-001	Tahoe Central Market	Miscellaneous Food	8487	North Lake	Kings Beach	8487 North Lake Blvd	Gravity Interceptor
090-123-027	Taco Bell	Restaurant	8491	North Lake	Kings Beach	8491 North Lake Blvd	Hydromechanical Interceptor
090-123-018	D'Lish Catering/Burrito Window	Miscellaneous Food	8501	North Lake	Kings Beach	8501 North Lake Blvd	Gravity Interceptor
090-122-038	La Mexicana	Restaurant	8515	Brook	Kings Beach	8515 Brook	
090-123-006	The Grid Bar & Grill	Restaurant	8545	North Lake	Kings Beach	8545 North Lake Blvd	Hydromechanical Interceptor
090-123-028	7-Eleven Kings Beach	Miscellaneous Food	8599	North Lake	Kings Beach	8599 North Lake Blvd	Exempt
090-134-005	Sweet Tahoe Time		8636	North Lake	Kings Beach	8636 North Lake Blvd	Hydromechanical Interceptor
090-133-005	Spirits of Tahoe	Miscellaneous Food	8645	North Lake	Kings Beach	8645 North Lake Blvd	Exempt
090-134-039	Log Cabin		8692	North Lake	Kings Beach	8692 North Lake Blvd	Hydromechanical Interceptor
090-134-029	Subway	Restaurant	8700	North Lake	Kings Beach	8700 North Lake Blvd	Exempt
090-134-011	Brockway Bakery		8710	North Lake	Kings Beach	8710 North Lake Blvd	
090-192-004	Taco's Jalisco	Restaurant	8717	North Lake	Kings Beach	50 GPM Great Basin interceptor	Hydromechanical Interceptor
090-142-025	Char Pit	Restaurant	8732	North Lake	Kings Beach	8732 North Lake Blvd	Gravity Interceptor
090-192-056	Caliente Restaurant	Restaurant	8791	North Lake	Kings Beach	8791 North Lake Blvd	Gravity Interceptor
090-306-001	Kaz 42	Restaurant	9980	North Lake	Kings Beach	9980 North Lake Blvd	Gravity Interceptor
090-294-008	Soule Domain		9983	Cove	Kings Beach	9983 Cove	Hydromechanical Interceptor
090-062-002-002	Boys and Girls Club	School/Church	8125	Steelhead	Kings Beach	In front of Boys & Girls Club on	Gravity Interceptor

8.0 SYSTEM EVALUATION, CAPACITY ASSURANCE, AND CAPITAL IMPROVEMENTS

The System Evaluation, Capacity Assurance, and Capital Improvements Plan element is provided to ensure adequate capacity is available during extreme events, to prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design for storm or wet weather events. At a minimum, the plan must include:

- **Evaluation:** Actions are needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events.
- **Design Criteria:** Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria.
- **Capacity Enhancement Measures:** The steps needed to establish short- and long-term Capital Improvement Program to address identified hydraulic deficiencies include prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
- **Schedule:** The District shall develop a schedule of completion dates for all portions of the capital improvement program developed in the above. This schedule shall be reviewed and updated consistently with the SSMP review and update requirements.

8.1 SERVICE AREA AND COLLECTION SYSTEM DESCRIPTION

The North Tahoe Public Utility District (NTPUD) is located on the northern shore of Lake Tahoe. The service area covers approximately 6.5 square miles and includes Kings Beach, Brockway, Tahoe Vista, Carnelian Bay, Ridgewood, Cedar Flat, Chinquapin and surrounding areas. NTPUD collects wastewater from within its service area and conveys it to a connection point with the Tahoe Truckee Sanitation Agency (TTSA) in the Tahoe City Public Utility District service area at Dollar Hill. TTSA conveys the flow through an interceptor pipeline to a water reclamation plant in Truckee.

Chapter 4 of the SSMP provides an overall description of the sanitary collection system.

The NTPUD collection system is summarized in Table 8-1.

Table 8-1. Collection System Characteristics

Infrastructure	Category	Extent
Collection System Pipeline	Gravity Mains	74.8 miles
	Force Mains	6.6 miles
	Diameter Range	6 – 36 inches
Wastewater Pump Stations	Main, Satellite, & Grinder Sewer Pump Stations	20

Characteristics of the pump stations are summarized in Table 8-2.

Table 8-2. Wastewater Pump Station Characteristics

Name	Location	Number of Pumps	Pump Capacity (gpm)	Pump TDH (ft)	Emergency Power	Wetwell Capacity (gallons)
S1	9890 Speed Boat Avenue	2	75	42	Port.Gen.	500
S2	9875 Pilot Circle	2	75	33	Port.Gen.	2000
Mashie Grinder	7809 Mashie Avenue	2	50	15	Port.Gen.	200
Secline	121 Secline Street	4	725	20	Sta.Gen.	45000
N1	7496 North Lake Boulevard (Moon Dune)	2	150	42	Sta.Gen.	2000
Park Grinder	North Tahoe Regional Park	2	50	15	Port.Gen.	200
N2	6542 North Lake Boulevard (Tahoe Sands)	2	250	23	Port. Gen.	1680
N3	6073 North Lake Boulevard	2	350	20	Sta.Gen.	500
National Main	7010 North Lake Boulevard	3	1200	32	Sta.Gen.	60000
C1	5464 North Lake Boulevard (Sahara)	2	100	34	Port.Gen.	2000
C2	5000 North Lake Boulevard	2	300	34	Sta.Gen.	500
Carnelian Main	225 Onyx Street	4	1200	59	Sta.Gen.	33000
D1	4600 North Lake Boulevard	2	100	77	Port.Gen.	3200
D2	4360 North Lake Boulevard	2	100	81	Port.Gen.	4000

Name	Location	Number of Pumps	Pump Capacity (gpm)	Pump TDH (ft)	Emergency Power	Wetwell Capacity (gallons)
D3	4240 North Lake Boulevard	2	150	72	Port.Gen.	5400
D4	4000 North Lake Boulevard	2	250	79	Port.Gen.	10000
D5	3740 North Lake Boulevard	2	100	35	Port.Gen.	500
D6	24 Chinquapin	2	200	50	Sta. Gen.	500
D7	280 Observation Court	2	100	50	Port.Gen.	500
Dollar Main	3630 North Lake Boulevard	4	1650	220	Sta.Gen.	41000

8.2 WASTEWATER FLOWS

This section summarizes information related to the amount of wastewater generated within the District and discharged to TTSA facilities. TTSA flow meter data is available at this connection point, providing the ability to monitor and analyze both current and historical flows as well as provide information to aid in projecting potential future flows generated within the District.

Average daily wastewater flows from 2015 through 2025 are shown in Figure 8.1. The average dry weather flow for the eleven years in the data set is 0.76 mgd. This is similar to the mathematical average of the 2009 dry weather (0.765mgd) and wet weather flow (0.830 mgd), 0.8 mgd, presented in the 2009 data in Table 8.3. The data shows that sewer flows have remained flat from 2009 through 2025. This reflects the low growth and second home occupancy that depresses sewer flows from typical growth scenarios.

Figure 8.1 Annual Average Daily Flows 2015-2025

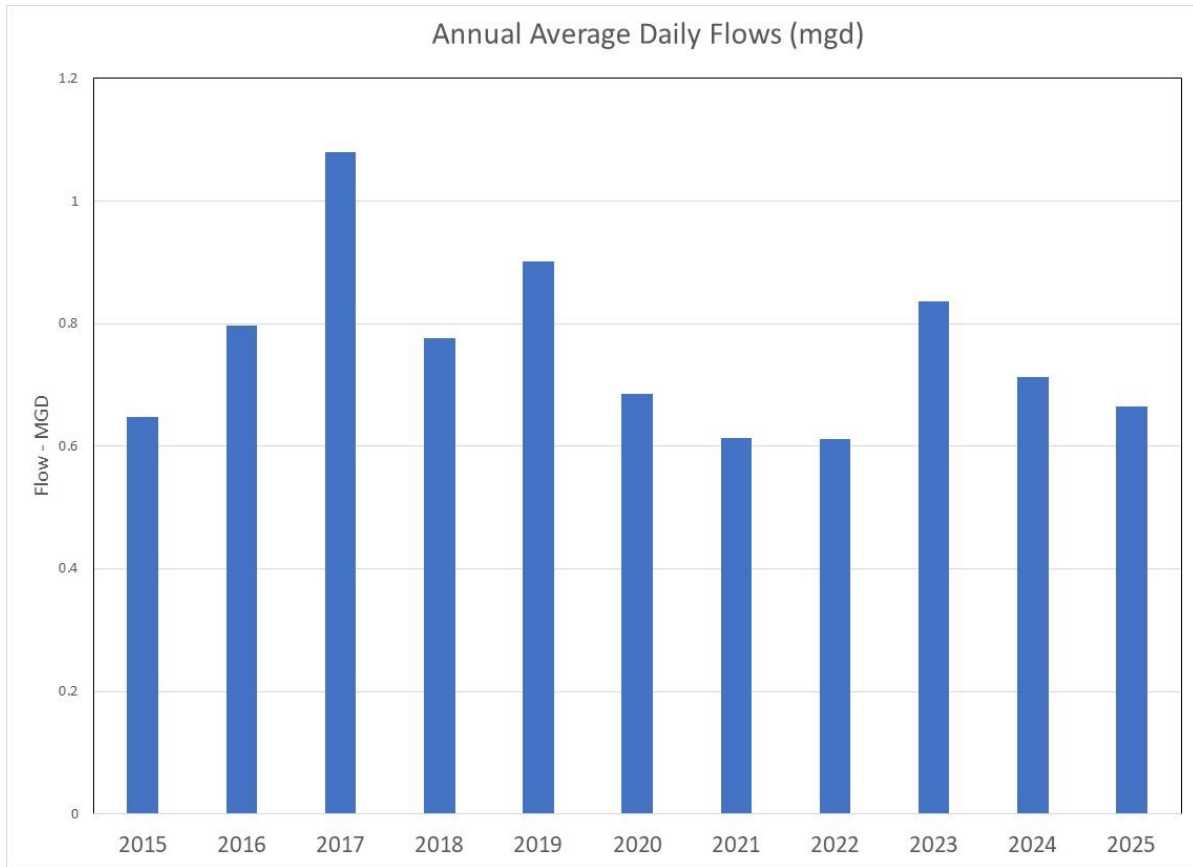
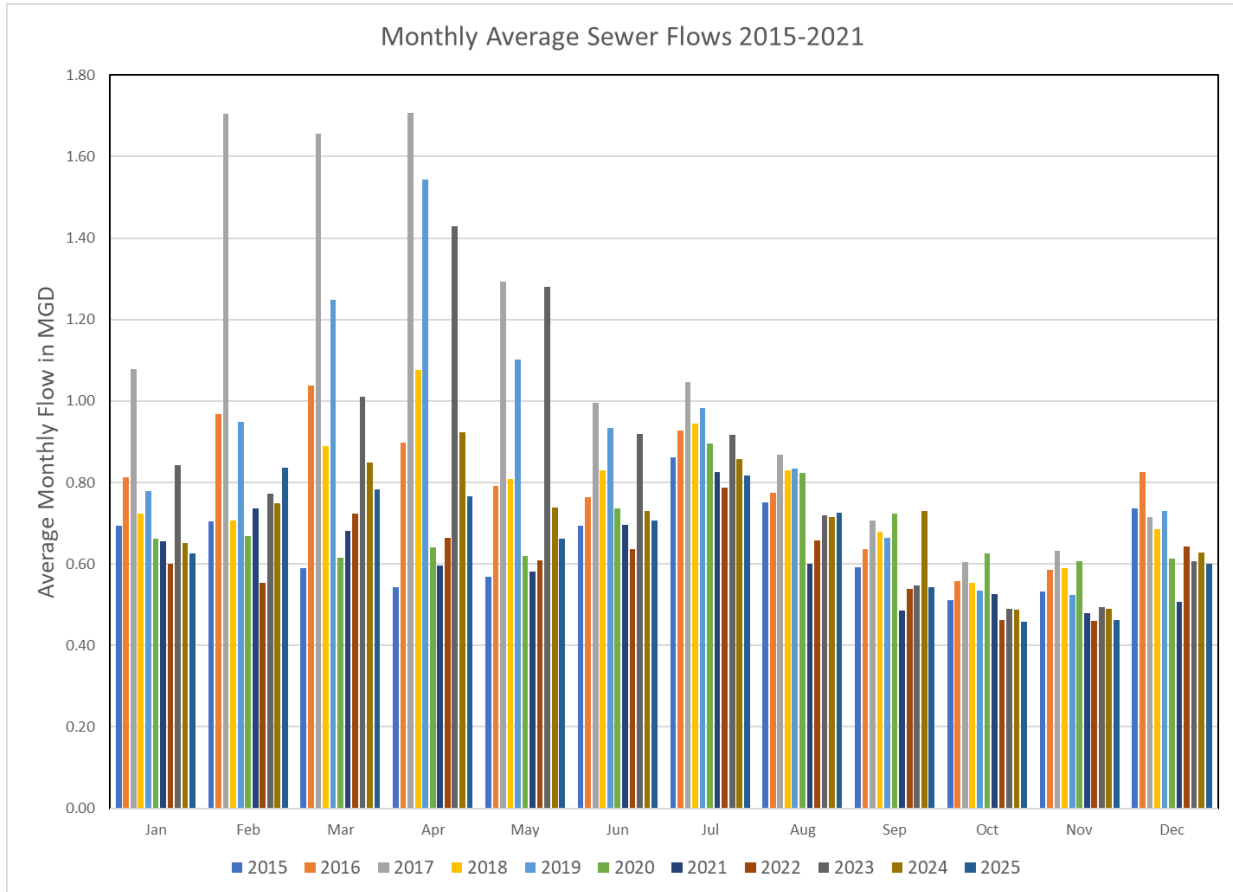


Figure 8.2 presents the average daily flow for each month over the same 2015-2025 period. What is most noticeable is the higher average daily flows in the snow melt months of February through May. The fall months of September to November are consistent every year and represent baseline sewer flows.

Figure 8.2 Monthly Average Flows 2015-2021



The District completed a Main Sewer Pump Station Master Plan (MSPSMP) in 2009. One of the objectives of this study was to characterize the flow generation within the District and the potential for future increases. This study was very thorough in establishing applicable flow rates whereby significant flow monitoring throughout the District was performed as well as an analysis of TTSA meter records. Flow characteristics from this study are summarized in Table 8-3 below:

Table 8-3. Design Flow Rates (units and information unedited per MSPSMP):

Flow Parameter	Average Daily Flow (MGD)	Peak Hour Flow (MGD)
2009 Dry Weather ⁽¹⁾	0.765	1.790
2009 Wet Weather ⁽¹⁾	0.830	1.929
2029 Dry Weather ⁽²⁾	0.887	2.075
2029 Wet Weather ⁽²⁾	0.989	2.331
Flood Flow ⁽¹⁾⁽²⁾	5.193	

(1) MSPSMP – Table I.5 (Tech Memo 2)

(2) MSPSMP – Table I.11 (Tech Memo 2)

For new development, the District has historically used Sanitary Sewer Flow Evaluation Guidelines. Based on NTPUD’s guidance, the peak dry weather flow is two times the design dry weather flow. As shown in the above table, this approximate peaking factor historically used is validated through the 2009 MSPSMP. These guidelines include values for estimating design dry weather flow rate as shown in Table 8-4:

Table 8-4. Design Dry Weather Flow Factors

Type of Facility or Use	Design Dry Weather Flow Rate
Single family residence	300 gpd
Two family residence	600 gpd
Apartment to a single family unit (up to 400 sq. ft.)	150 gpd
Motels with kitchenettes, apartments, townhouses, mobile homes, trailers, co-ops, etc. up to 600 sq. ft. of gross floor area	150 gpd/unit
Motels with kitchenettes, apartments, townhouses, mobile homes, trailers, co-ops, etc. 601-1200 sq. ft. of gross floor area	225 gpd/unit
Motels with kitchenettes, apartments, townhouses, mobile homes, trailers, co-ops, etc. greater than 1200 sq. ft. of gross floor area	300 gpd/unit
Motel unit less than 400 sq. ft.	100 gpd/unit
Motel unit greater than 400 sq. ft.	150 gpd/unit
Cafeteria (integral to an office or industrial building)	2.50 gpd/capita
Non-medical office space	0.06 gpd/sf gr. floor area
General industrial space	0.04 gpd/sf gr. floor area
Medical arts (doctor, dentist, urgent care)	0.10 gpd/sf gr. floor area
Restaurant (16 seat minimum or any size with dishwasher)	30 gpd/seat
Restaurant (fast food)	20 gpd/seat

Type of Facility or Use	Design Dry Weather Flow Rate
Wet store-Food processing	0.15 gpd/sf gr. floor area
Wet store no food (barber shop, beauty salon, etc.)	0.10 gpd/sf gr. floor area
Dry store (no process water discharge)	0.03 gpd/sf gr. floor area
Market	0.05 gpd/sf gr. floor area
Bar, tavern, disco	15 gpd/occupant + food
Service stations	300 gpd/double hose pump
Laundry	425 gpd/laundry machine
Others	As Determined by Engineer

8.2.1 LIFT STATION CAPACITIES AND FLOWRATES

To ensure capacity at each pumping facility, expected flow rates for each facility vs. the pumping capacities available at each are examined. As part of the 2009 MSPSMP, wet well drawdown tests were performed at each main station which provided the current capacities for each pump. In addition, flow rates, including flood flows, were established for each main station. The 2009 MSPSMP also included information on the satellite pump stations. Although expected flood flows for each satellite were not examined, the numbers of connections was; this is utilized to establish an approximate expected domestic wastewater flow rate. From this, an applicable peaking factor (established through the main station analysis) is applied which provides a “worst case scenario” for each satellite station. The below two tables summarize the expected flows and relative capacities for all District pumping stations:

Table 8-5. Main Pump Station Flows and Pumping Capacities

Pump Station	Pump #	Capacity (gpm)	Required Capacity (Flood Flow) ⁽¹⁾ (gpm)
Secline	1, 2, 3, 4	725 ea.	1638
National	1, 2, 3	1200 ea.	2359
Carnelian	1, 2, 3, 4	1200 ea.	2,870
Dollar Main & Dollar Addition	1, 2, 3, 4	1650 ea.	3,606

Note 1 - Total required station handling capacity per Stantec "Pump Station Master Plan"

Note 2 - Total existing station capacity not equal to sum of all pumps. With largest pump out of service, remaining in-duty pumps have been verified to meet or exceed required capacity,

Table 8-6. Satellite Pump Station Flows and Pumping Capacities

Pump Station	Design Flowrate ⁽¹⁾ (gpm)	Services Served ⁽¹⁾	Flowrate per service ⁽²⁾ (gpd)	Flowrate (gpd)	Flowrate (gpm)	Peak (2 X's) (gpm)
S1	75	11	300	3300	2	5
S2	75	17	300	5100	4	7
N1	100/300	178, 27 room lodge	300, 225	53400 + 6075	41	82
N2	250	30 room lodge	225	6750	5	9
N3	350	353	300	105900	74	147
C1	100	196	300	58800	41	82
C2	300	103	300	30900	21	43
D1	100	31	300	9300	6	13
D2	100	49	300	14700	10	20
D3	150	73	300	21900	15	30
D4	250	204	300	61200	43	85
D5	100	17	300	5100	4	7
D6	200	190	300	57000	40	79
D7	100	15	300	4500	3	6
Mashie	80	2	300	600	0.4	1
Park		Rest Room (minor pump station)				

(1) Per Stantec "Pump Station Master Plan"

(2) Per Table Above

8.2.2 Historical Flows:

As discussed above, TTSA flow data is available for use in analyzing historical flows. As part of the 2009 MSPSMP a thorough look at ten years of data was reviewed in correlation with precipitation data. The summary of this analysis is quoted below from the Report:

“The T-TSA monthly flow volume data, calculated as the sum of the average daily flow rate values, is shown in Figure 1.1. It can be observed from Figure 1.1 that there is a consistent seasonal flow pattern in the T-TSA data. There is a good correlation of the flow rates between wet years and drier years, and the impact of tourism on sewage production is evident on a seasonal basis. It can also be observed that the annual average daily flow rate has been decreasing since 1999, likely due to either a gradual reduction in primary residences in the District service area and a corresponding shift toward part-time occupied residences or to a decrease in precipitation levels. In an attempt to understand the decline in average daily flow rates, precipitation data were obtained from the California Data Exchange Center for Tahoe City for the previous ten years. This information is also presented in Figure 1.1. The two months exhibiting the greatest flow rates in the available T-TSA data were April of 1999 and April of 2006. These time frames were preceded by high precipitation levels during the winter months, suggesting that substantial infiltration occurred due to melting snowpack and rising groundwater levels in the spring of 1999 and 2006.”

8.3 SYSTEM EVALUATION

Historically, NTPUD has not experienced SSOs that were due to inadequate hydraulic capacity. Due to regional growth limitations enacted by the Tahoe Regional Planning Agency (TRPA), NTPUD forecasts that its collection system capacity will not be exceeded by the current or projected build-out flows. Historically the District has tracked SSOs since 1988 and maintains separate records for the times prior to SSO reporting via CIWQS as currently required. None of the SSOs on record have been identified as being caused by inadequate hydraulic capacity.

The 2009 MSPSMP addresses SSO risk and system characteristics. Technical Memo 1, section 5.4.1.2 quotes:

“The gravity system spills experienced by the District are generally not a result of under-sized pipelines. According to District staff, the existing collection system pipeline network has pipeline diameters large enough to convey the historic and future sewage loading based on potential growth. The pipeline system conveyance capacity is not exceeded even with the substantial collection system inflow and infiltration the District experiences. The most severe example of collection system inflow and infiltration occurred with the New Year’s Day Flood of 1997. During this event, flow within the sewage export system is estimated to have reached the equivalent of five million gallons per day which is roughly five times greater than the current average day flow rate. It is believed that some property owners could have possibly alleviated

flooding on their property by opening sanitary sewer cleanouts and allowing standing water to flow through the sewage collection system. In spite of this, the District's sewage collection and export systems were able to convey all flow. Holiday periods also result in higher than normal flow rates; however, even during periods such as the Fourth of July Holiday, the District's collection and export system pipelines are large enough to convey the resulting sewage flow."

Although SSO's have not occurred due to hydraulic limitations, sewer pipes are inspected periodically, as described in Section 4 of this document. During these inspections, any evidence of surcharging, high water marks, or infiltration are noted in the database. District staff then follow up to investigate these areas, determine what or why this evidence exists, and, more importantly, takes necessary steps to eliminate future occurrences.

As discussed above, the need for design criteria addressing hydraulic deficiencies is not applicable by virtue of the NTPUD system not experiencing hydraulic deficiencies. Regardless of a lack of historical deficiencies, the District has been proactive in establishing Sanitary Sewer Flow Evaluation Guidelines for new development. The criteria state that sanitary sewer connection will be allowed if and only if:

- Sanitary sewer trunks and laterals do not experience surcharging.
- The total of existing dry weather peak flow, wet weather flow, and proposed project peak dry weather flow is less than 50% of sewer pipe design capacity.
- There have been no historical reported backups for the sanitary sewer trunk system to which the proposed project will be connected. (Sanitary sewer trunk system includes trunk sewer and flow contributing laterals).

The District completed a Sewer Master Plan in 1991 as well as the MSPSMP in 2009 to provide an updated evaluation of the main pump stations that convey wastewater throughout the District. The hydraulic evaluation in both reports in turn focused on the potential for downsizing some forcemains to reduce travel times through the system. The District currently sees and expects future flows significantly less than original design flows, leading to extended travel times in the larger force mains

Regardless of the lack of need for CIP projects necessary to increase hydraulic deficiencies, the District publishes a CIP each fiscal year. It includes the projects, timelines, and budgets for improvement projects identified by the District.

Although the District has not identified any collection system hydraulic capacity limitations, the CIP includes several sewer system improvements to improve reliability for future operations. These projects will be funded by the District's Sewer Capital Fund.

The CIP projects planned for the sewer fund are summarized in the District's five-year CIP for purposes of near future planning. In addition, the District maintains a list of identified capital projects outside of the 5-year CIP.

9.0 MONITORING, MEASUREMENTS, AND PROGRAM MODIFICATIONS

Per requirements of section D.9 of the 2022 WDR, and as part of best management practices, the District:

- Maintains relevant information, including audit findings, that can be used to establish and prioritize appropriate SSMP activities.
- Monitor the implementation and measure the effectiveness of each element of the SSMP.
- Assess the success of the preventative maintenance program.
- Updating Plan procedures and activities, as appropriate, based on results of monitoring and performance evaluations.
- Identify and illustrate spill trends, including: frequency, location, and volume.

9.1 INTRODUCTION

The District monitors the effectiveness of the Risk-Based SSMP regularly and will update and modify the Risk-Based SSMP elements as necessary to keep them current, accurate, and available for audit. The following describes the District's procedure for monitoring the effectiveness of the Risk-Based SSMP and the procedures used to minimize SSOs.

9.2 MONITORING

The District tracks Key Performance Indicators (KPI) through District recorded information. Lucity queried cleaning records and statistics from sanitary sewer overflow reports. To monitor the effectiveness of the Risk-Based SSMP, the District selected a procedure to monitor & document specific parameters, which are compared on an annual basis. These parameters provide quantitative, focused results intended to indicate the overall success of the Risk-Based SSMP or, conversely, the underlying problems that may then be further investigated. Table 9-1 lists each Risk-Based SSMP element, the overall purpose of the Risk-Based SSMP element, and the specific parameters that the District plans to track that will help evaluate the effectiveness of the Risk-Based SSMP.

Table 9-1. Risk-Based SSMP Monitoring Parameters

Risk-Based SSMP Section	Summary of Element Purpose	KPI
1.0 Goals	Establish priorities of the District and provide a focus for District Staff	<ul style="list-style-type: none"> As part of Element 10 – Program Audits, reconsider Goals and evaluate potential changes
2.0 Organization	Document organization of District staff and chain of communication for SSO response	<ul style="list-style-type: none"> As part of Element 10 – Program Audits, update Organization Chart as staff changes or reorganizations occur
3.0 Legal Authority	Ensure the District has sufficient legal authority to properly maintain the system	<ul style="list-style-type: none"> None needed
4.0 Operations and Maintenance Plan	Minimize blockages and SSOs by properly maintaining the system and keeping the system in good condition	<ul style="list-style-type: none"> Total number and volume of SSOs Causes of SSOs Number of repeat SSOs (the same location as any previous SSO, regardless of the year of occurrence) Length of pipe inspected with CCTV per year
5.0 Design & Performance Provisions	Ensure new facilities are properly designed and constructed	<ul style="list-style-type: none"> None needed
6.0 Spill Emergency Response Plan	Provide timely and effective response to SSO emergencies and comply with regulatory reporting requirements	<ul style="list-style-type: none"> Average and maximum response time Percent of total overflow volume contained or returned to the sewer
7.0 Sewer Pipe Blockage Control Program	Minimize blockages and overflows due to FOG	<ul style="list-style-type: none"> Number of overflows due to FOG (linked to SSO Identification Number) Number of FOG producing facilities inspected (on schedule) Percent of FOG producing facilities found to be in compliance
8.0 System Evaluation, Capacity Assurance and CIP	Minimize SSOs due to insufficient capacity by evaluating the system capacity and implementing necessary projects	<ul style="list-style-type: none"> Number of SSOs due to capacity limitations or wet weather (linked to SSO Identification Number)
9.0 Monitoring, Measurement, and Program Modifications	Evaluate the effectiveness of SSMP, keep SSMP up-to-date, and identify necessary changes	<ul style="list-style-type: none"> As part of Element 10 – Program Audits, evaluate the tracking of KPI and effectiveness in determining the effectiveness of SSMP
10.0 Internal Audits	Formally identify SSMP effectiveness, limitations, and necessary changes on an annual basis	<ul style="list-style-type: none"> Date of completion of last annual audit
11.0 Communication Program	Communicating with the public and satellite agencies	<ul style="list-style-type: none"> Number of written comments received from the public Percentage of positive comments

The District uses these KPIs to assist with the completion of the annual Risk-Based SSMP program audit described in Chapter 10. The District also continues to track additional information, such as customer complaints, length of pipe cleaned, length of pipe inspected, etc., to assist with the evaluation of its Risk-Based SSMP effectiveness.

9.3 RISK-BASED SSMP MODIFICATIONS

The District tracks parameters shown in Table 9-1, the result of which is included in the KPI checklist. As a checklist updated annually, the KPI list is provided in Appendix B. The checklist is not provided as part of this chapter, as the SSMP potentially will not require updating more than the six-year timeframe . The District will review the success of and/or necessary improvements to its Risk-Based SSMP as part of the required two-year Risk-Based SSMP program audit (see chapter 10). The District will update critical information, such as contact numbers, available emergency equipment, the chain of communication, etc., as needed. As required, a comprehensive Risk-Based SSMP update will occur every six years (see chapter 10) for program audits and tracking of SSMP revisions/updates.

10.0 PROGRAM AUDITS

This Risk-Based SSMP section serves to record the evolution of the Risk-Based SSMP Elements. The District will audit its Risk-Based SSMP once every three years per requirements of Section 5.4., Sewer System Management Plan Audits and section D.10 of the 2022 WDR, and the Regional Board schedule. The full Risk-Based SSMP is required to be updated every six years according to the requirements of Section 5.5. Six-Year Sewer System Management Plan Update and section D.10 of the 2022 WDR and the Regional Board schedule.

10.1 AUDITS

The Enrollee shall conduct an internal audit of its Sewer System Management Plan, and implementation of its Plan, at a minimum frequency of once every three years. The District's Engineer will lead the audit of the District's SSMP. These audits will identify any deficiencies in the current Risk-Based SSMP and describe the steps required to correct those deficiencies (if applicable). The program audit will cover the period from the previous SSMP Revision to the current date. Each of the major elements of the Risk-Based SSMP will be addressed during the audit. Where results of the evaluation indicate deficiencies, corrective measures will be developed. The results of the audit will be included in an Audit Report. The written report summarizing the findings from the audit will be kept on file with the Risk-Based SSMP, provided in Appendix C. The Legally Responsible Official shall submit the audit report into the online CIWQS Sanitary Sewer System Database

10.2 RISK-BASED SSMP UPDATES

The full Risk-Based SSMP is required to be updated every six years. The District will update its Risk-Based SSMP based on the program audit results and the performance of its wastewater collection system. The Enrollee's governing entity shall approve the updated Plan. The Legally Responsible Official shall upload and certify the approved updated Plan in the online CIWQS Sanitary Sewer System Database

11.0 COMMUNICATION PROGRAM

11.1 PURPOSE

The District implemented a communication program to communicate, on a regular basis, with the public on the development, implementation, and performance of the Risk-Based SSMP, and sewer system in general. The communication system provides the public with the opportunity to offer input to the District in regard to the SSMP. Input by the public may be made in regard to any portion of the SSMP, whether it be simple general questions/clarifications or the overall performance of the sewer system and plan.

Per requirements of section D.11 of the 2022 WDR and as part of best management practices.

11.2 COMMUNICATING SEWER SYSTEM PERFORMANCE

The District continues to conduct public outreach and education for residents and businesses related to the sanitary sewer system. Outreach primarily covers issues that, when left unaddressed, could be a leading cause of an SSO. The District will continually update the District’s website. It will disseminate information in meetings, special events, social media, newsletters, and/or by flyers to residences, land developers, consulting engineers, and plumbing contractors regarding the need and methods to reduce SSOs. Plumbers and sewer contractors will have access to all available District plans, specifications, and standard details to ensure that projects are properly designed and built to the District Standards.

11.3 EDUCATIONAL INFORMATION

Useful educational information regarding the prevention of SSOs can also be found on the following websites:

<https://ntpud.org/public-utilities/sewer/sewer-overflow-protection/>

<https://www.sacsewer.com/stop-the-clog/>

Information on other Tahoe Basin sewer agencies’ SSMPs can be found at their respective websites, as listed in Table 11-1.

Table 11-1. Tahoe Basin Sewer District Websites

District	Website
Incline Village General Improvement District	www.ivgid.org
Kingsbury General Improvement District	www.kgid.org
North Tahoe Public Utility District	www.ntpud.org
Round Hill General Improvement District	www.rhgid.org
South Tahoe Public Utility District	www.stpud.us

District	Website
Tahoe City Public Utility District	www.tcpud.com
Truckee Sanitary District	https://www.truckeesan.org/ssmp/

Table 11-2. SSMP Revision Tracking

Audits every 3 years, Plan Update every 6 years for Regional Board schedule

- May 11, 2010 (initial adoption)
- October 8, 2013 (1st revision)
- September 29, 2016 (2nd revision)
- December 1, 2022 (3rd revision – administrative updates and figures and tables)
- April 14, 2026 (4th revision – Adopted by NTPUD Board)

Adoption Date	SSMP Version	Reason for publication
5/11/2010	1 st (initial document)	Per State WRCB Order No. 2006-0003-DWQ Permit Requirements
10/8/2013	2 nd (Revision #1)	Per 8-28-12 State WRCB Violation letter, 9-26-12 NTPUD Response to Violation letter, And 9-9-13 Amended MRP (Order 2013-0058-EXEC)
9/29/2016	3rd (Revision #2)	Updated all Appendix and some edits to body of document. (Note: these edits were not “significant updates” and as such did not require “re-certification” by the governing body (per SWRCB Order No. 2006-0003-DWQ, section D.14)
12/1/2022	4 th (Revision #3)	Updated all Tables, Figures, Appendix and some edits to body of document. (Note: these edits were not “significant updates” and as such did not require “re-certification” by the governing body (per SWRCB Order No. 2006-0003-DWQ, section D.14)
04/14/2026	5th (Revision #4)	Updated all Tables, Figures, Appendix and edits to body of document for compliance with SWRCB Order WQ 2022-0103-DWQ. Approved by NTPUD Board per Resolution XXX

Appendix A

Spill Emergency Response Plan



Spill Emergency Response Plan

(Formerly the SSO Emergency Response Operating Procedure)

June 2, 2023

- Required per State Water Resources Control Board, Statewide Waste Discharge Requirements, General Order For Sanitary Sewer Systems, Order WQ 2022-0103-DWQ
- Satisfies Requirements Of Sanitary Sewer Management Plan (SSMP), Chapter 6

1 – Contacts and Codes

- Emergency Spill Contact Information
 - Contractor Aid Phone Numbers
 - NTPUD Employee Directory
 - Gate Codes

2 – Emergency Response Procedure

- Statewide Sanitary Sewer Systems General Order 2022-0103-DWQ
 - NTPUD SSO Emergency Response Operating Procedure
 - NTPUD Sewer Station Alarm Procedures
 - NTPUD General Response Flow Chart
 - NTPUD Detailed Response Tasks

3 – Notification, Monitoring, Reporting and Recordkeeping Requirements

- Statewide Sanitary Sewer Systems General Order 2022-0103-DWQ

4 – Forms and Documents

- SSO Response – Field Checklist & Documentation – Field Crew
- SSO Response – Field Checklist & Documentation – Duty Supervisor
 - Post-SSO Briefings, Findings & Review – Duty Supervisor
 - Agreement for Emergency Repairs on Private Property

5 – Volume Estimation Methods and Reference Photos

6 – Mutual Aid Districts and Agreement

7 – Emergency Dump MH Maps

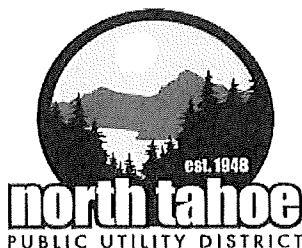
8 – Receiving Water Quality Sampling and Analysis

- Regulatory Language
 - Procedure
- Documentation Form

**Tab 1 – Spill Response Plan
June 2, 2023**

Contacts & Codes

- 1. Emergency Spill Contact Information**
- 2. Contractor Aid Phone Numbers**
- 3. NTPUD Employee Directory (Not for public version)**
- 4. Gate Codes (Not for public version)**



EMERGENCY SPILL CONTACT INFORMATION

The key to responding to emergencies is a prompt and efficient response. In the event of an overflow, the following numbers are provided for quick reference. Spill Category must be determined for proper spill reporting to the California Office of Emergency Services – Sewer Overflow Notification

For SSOs: See Section 2-"Notification and Reporting Requirements" for required notifications.

1. Eliminate the cause of the overflow and concurrently notify:

District's Duty Supervisor: Cell Phone: (530) 392-0241

2. **District Management Personnel to be Contacted by Duty Supervisor**

Ken Fischer	Utility Operations Manager	Cell (775) 790-5597
Jason Dicey	Utility Operations Superintendent	Cell (530) 414-3863
Joe Pomroy	Eng. and Ops. Manager	Cell (775) 233-7069
Brad Johnson	General Manager	Cell (510) 915-5654
Justin Broglio	Public Information Officer	Cell (530) 414-8401

2. **State Regional Water Quality Control Board:**

<u>Lahontan Regional Water Quality Control Board (South Lake Tahoe Office)</u>	(530) 542-5400
(Courtesy Call only):	
<u>Cal Office of Emergency Services – Category 1 and Category 2 Spill >1000 gallons</u>	(800) 852-7550
State Warning Center - Sewer Overflow Notification 24/7 (Identify NTPUD: Region 6)	

3. **Tahoe Regional Planning Agency (Courtesy Call only):**

Business Hours (Attn: Steve Sweet)	(775) 589-5250
Media Contact	(775) 589-5278

4. **Placer County Environmental Health Department**

(Courtesy call for Main line spills) and/or (if required on Private Property SSO's)	
<u>Business Hours - Tahoe City Office</u>	(530) 581-6240
<u>After Business Hours - Placer Co. Sheriff</u>	(530) 581-6300

For Water System Issues Notify:

California Water Resources Control Board - Division of Drinking Water

	#
Steve Watson	(530) 224-4828
<u>Katie Connaughton</u>	(530) 224-4870
<u>Michael Burgess</u>	(530) 224-6506
<u>Nick McGann</u>	(530) 224-3269
<u>Rick Wade</u>	(530) 224-2413

When contacting Cal-Division of Drinking Water use the appropriate System #.	
Tahoe Main	CA3110001
Carnelian Woods	CA3110023
Dollar Cove	CA3110036

If Water Spill enters Waterway (i.e. hits the lake) Notify the Lahontan Regional Water Quality Control Board

For Oil spills, chemical release or radiological event Notify Environmental Protection Agency

E.P.A.'s 24-Hour National Response Center (800) 424-8802.
State Warning Center 800-852-7550

CONTRACTOR AID PHONE NUMBERS

Portable Pumps

United Rentals, Sparks, NV
Sunbelt (Reno)
Rain for Rent, Stockton, CA
Pacific Machine Co., Sparks, NV
Cashman Equipment (power division)
Herc Rentals

Phone

(775) 359-6660
(775) 343-7488
(209) 466-5602 cell (209) 649-5410
(775) 359-8500 (775) 690-2484
(800) 937-2326 (775) 358-5111
775-359-9090

Portable Generators

Nevada Generator Systems
Cashman Equip. (power division)
Herc Rentals

Phone

(775) 356-8010 24 hr (775) 825-1184
(800) 937-2326 (775) 358-5111
775-359-9090

Tanker and Vacuum Trucks

LST Trucking
Water's Vacuum Tank Trucks
Water's Water Trucks
Clean Harbors

Phone

(775) 345-6900
(775) 825-1595
(530) 587-7994
(775) 331-9400

**Tab 2 – Spill Response Plan
June 2, 2023**

Emergency Response Procedure

- 1. Statewide Sanitary Sewer Systems General Order 2022-0103-DWQ**
 - a. Attachment E2 – Summary Of Notification, Monitoring And Reporting Requirements
- 2. NTPUD SSO Emergency Response Operating Procedure**
 - a. Generalized Response
- 3. NTPUD Sewer Station Alarm Procedures**
- 4. NTPUD General Response Flow Chart**
- 5. NTPUD Detailed Response Tasks**

ATTACHMENT E2 – SUMMARY OF NOTIFICATION, MONITORING AND REPORTING REQUIREMENTS

This Attachment provides a summary of notification, monitoring and reporting requirements, by spill category, and for Enrollee-owned and/or operated laterals as required in Attachment E1 of this General Order, for quick reference purposes only.

Table E2-1

Spill Category 1: Spills to Surface Waters

Spill Requirement	Due	Method
Notification	<p>Within two (2) hours of the Enrollee’s knowledge of a Category 1 spill of 1,000 gallons or greater, discharging or threatening to discharge to surface waters:</p> <p>Notify the California Office of Emergency Services and obtain a notification control number.</p>	<p>California Office of Emergency Services at: (800) 852-7550</p> <p>(Section 1 of Attachment E1)</p>
Monitoring	<ul style="list-style-type: none"> • Conduct spill-specific monitoring; • Conduct water quality sampling of the receiving water within 18 hours of initial knowledge of spill of 50,000 gallons or greater to surface waters. 	<p>(Section 2 of Attachment E1)</p>
Reporting	<ul style="list-style-type: none"> • Submit Draft Spill Report within three (3) business days of the Enrollee’s knowledge of the spill; • Submit Certified Spill Report within 15 calendar days of the spill end date; • Submit Technical Report within 45 calendar days after the spill end date for a Category 1 spill in which 50,000 gallons or greater discharged to surface waters; and • Submit Amended Spill Report within 90 calendar days after the spill end date. 	<p>(Section 3.1 of Attachment E1)</p>

Table E2-2

Spill Category 2: Spills of 1,000 Gallons or Greater That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	<p>Within two (2) hours of the Enrollee's knowledge of a Category 2 spill of 1,000 gallons or greater, discharging or threatening to discharge to waters of the State:</p> <p>Notify California Office of Emergency Services and obtain a notification control number.</p>	<p>California Office of Emergency Services at: (800) 852-7550</p> <p>(Section 1 of Attachment E1)</p>
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> • Submit Draft Spill Report within three (3) business days of the Enrollee's knowledge of the spill; • Submit Certified Spill Report within 15 calendar days of the spill end date; and • Submit Amended Spill Report within 90 calendar days after the spill end date. 	(Section 3.2 of Attachment E1)

Table E2-3

Spill Category 3: Spills of Equal or Greater than 50 Gallons and Less than 1,000 Gallons That Does Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	Not Applicable	Not Applicable
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> • Submit monthly Certified Spill Report to the online CIWQS Sanitary Sewer System Database within 30 calendars days after the end of the month in which the spills occur; and • Submit Amended Spill Reports within 90 calendar days after the Certified Spill Report due date. 	(Section 3.3 and 3.5 of Attachment E1)

Table E2-4

Spill Category 4: Spills Less Than 50 Gallons That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	Not Applicable	Not Applicable
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> • If, during any calendar month, Category 4 spills occur, certify monthly, the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills into the online CIWQS Sanitary Sewer System Database, within 30 days after the end of the calendar month in which the spills occurred. • Upload and certify a report, in an acceptable digital format, of all Category 4 spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur. 	(Section 3.4, 3.6, 3.7 and 4.4 of Attachment E1)

Table E2-5

Enrollee Owned and/or Operated Lateral Spills That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	<p>Within two (2) hours of the Enrollee's knowledge of a spill of 1,000 gallons or greater, from an enrollee- owned and/or operated lateral, discharging or threatening to discharge to waters of the State:</p> <p>Notify California Office of Emergency Services and obtain a notification control number.</p> <p>Not applicable to a spill of less than 1,000 gallons.</p>	<p>California Office of Emergency Services at: (800) 852-7550</p> <p>(Section 1 of Attachment E1)</p>
Monitoring	Conduct visual monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> • Upload and certify a report, in an acceptable digital format, of all lateral spills (that do not discharge to a surface water) to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur. • Report a lateral spill of any volume that discharges to a surface water as a Category 1 spill. 	(Sections 3.6, 3.7 and 4.4 of Attachment E1)

SSO Emergency Response Operating Procedure (Generalized Response)

PHOTO and TIME documentation are Critical for Reporting

First Response:

- **Determine Resources Required:** (personnel, equipment, etc.) contact help and gather equipment as required.
- **Determine if assistance is needed** from Mutual Aid Districts and/or Contractors, and contact as required.
 1. See Emergency Spill Contact Information Sheet (Tab 1 this document)
 2. See Available Equipment (Tab 6 this document)
- **Determine SSO Category Reporting Requirements**
 1. See Tab 2, Section 1, Statewide Sanitary Sewer Systems General Order 2022-0103-DWQ, Attachment E2 – Summary Of Notification, Monitoring And Reporting Requirements (This is the summary Table in this tab)
 2. See Tab 3, Statewide Sanitary Sewer Systems General Order 2022-0103-DWQ, Attachment E1 – Notification, Monitoring And Reporting Requirements (This is the detailed regulatory guidance in Tab 3)

If category 1 or 2 spill (*any volume to Surface water and/or over 1,000 gallons*)

1. Call Duty Supervisor
2. Continue to **Response at SSO Scene** (next page)

If category 3 spill (*50 to 1,000 gallons*)

1. Continue to **Response at SSO Scene** (next page)

If category 4 spill (*Less than 50 gallons*)

1. Continue to **Response at SSO Scene** (next page)

If blockage or problem is on Private Property:

1. Shut off water to residence or private development if required
2. Continue to Private Property section of this document

Response at SSO Scene

(Prioritize tasks as required, every event is unique)

(PHOTO and TIME documentation are Critical for Reporting)

1. Safety First
 - Set up traffic control (if required) (See Contact Information, tab 1, this document)
 - Set up crowd control (if required)
 - Secure contaminated area
2. Regulate upstream flows when and if possible (BUY TIME!)
 - Isolate upstream pump station for storage if possible.
 - Pump down SSO location if possible
 - Shut off water if it will lessen flow
3. Containment
 - Eliminate and/or Minimize flow into storm drain, channel, or surface water
 - Utilize Sandbag barrier (bags ready behind Annex)
 - Berm or Excavation as required to contain spill
 - Utilize any controlled storage possible (Vacuum truck, Tankers, etc.)
 - Divert to existing basins (for later extraction)
4. Install bypass pumps and piping (if required)
 - Generac Pump and Bypass Hose System, etc.
5. Line up Tank or Vacuum truck brigade
 - Emergency Dump MH maps provided in tab 7, this document
6. Clear blockage or Correct Problem
 - Utilize vacuum truck for main or lateral clearing
 - Confirm with CCTV location and extent of blockage or issue
 - Excavate& Repair
 - Troubleshoot Pumping Station issues
 - Loss of commercial power – Deploy generator's
7. Resume normal pumping and operations

8. Take samples if required (See Tab 8 this document)
9. Estimate total spill volume (See Tab 5 this document)
10. Monitor system & Clean-up (Site Restoration as best as possible)
 - Recover as much SSO volume as possible (pooled, intercepted, re-routed, etc.)
 - Rake up, bag and properly dispose of all accessible SSO affected areas
 - Disinfect and/or flush & extract all areas impacted by the SSO
 - Do Not Chlorinate areas next to Lake Tahoe or streams where run off will reach the water body.
11. Fill out “SSO Response – Field Checklist & Documentation – Field Crew” form (Tab 4 this document)
 - Filled out as soon as time or available staff allows.
12. Determine cause and review operations to eliminate SSO cause from occurring in future

(SEE “DETAILED RESPONSE TASKS” IF REQD.)

Privately Owned Laterals

The State Water Resources Control Board Has Changed the Actions Taken.

Voluntary Notification of Spills from Privately-Owned Laterals and/or Systems to the California Office of Emergency Services.

Upon observing or acquiring knowledge of any of the following from a private sewer lateral or private sanitary sewer system that is not owned/operated by the NTPUD, is encouraged to notify the California Office of Emergency Services (as provided by Health and Safety Code section 5410 et. seq. and Water Code section 13271), or inform the responsible party that State law requires such notification to the Office of Emergency Services by any person that causes or allows a sewage discharge to waters of the State:

- A spill equal to 1,000 gallons or more that discharges (or has a potential to discharge) to waters of the State, or a drainage conveyance system that discharges to waters of the State; or
- A spill of any volume to surface waters

Actions

- Shut off water to residence or private development if necessary to reduce SSO
- Contact Duty Supervisor
- Contact property owner
 - Request that the property owner obtain licensed contractor for rehabilitation of the sewer lateral and site restoration.
 - If contractor service cannot be obtained, the “Agreement for NTPUD to Perform work on Private Property” can be completed by the owner which authorizes the District to preform cleanup and repair activities with the expenses billed directly to the property owner (See tab 4 this document)
 - Notify Placer County Environmental Health if required.
 - If the property owner cannot be contacted.
 - The “Agreement for NTPUD to Perform work on Private Property” can be signed by Placer County Environmental Health directing the District to proceed with the cleanup activities at the owner’s expense. (see Tab 4)

Duty Supervisor

- Proceed to the site immediately.
- Fill out and follow all steps on “SSO Response – Field Checklist & Documentation – Duty Supervisor” form (Tab 4 this document)
- If Category 1 or 2, contact GM, PIO & EOM immediately following any required notifications required (See Tab 3 this document)
- Follow-up after the SSO response is completed.
 - Obtain all required information to be reported (See tab 3 this document)
 - Notify and/or Report (See Tab 3 this document)
 - Fill out “Post-SSO Briefings, Findings & Review” form (See Tab 4 this document)

SSO Documentation and Record Keeping

- A record of all events shall be maintained in:
 - R:/Engineering/Sewer Spills (SSO's) & Water Leaks
- Create a new folder in applicable SSO Category folder.
 - Naming of new folder shall follow "YYYY-MM-DD - Brief location"
- Include as much information on the event as possible. Create sub-folders if necessary for file organization. Information to be contained in SSO event folder may include (but not limited to):
 - Photos and videos
 - Scan of all completed documentation forms
 - Work Orders for repairs or corrective actions
 - Memo of event (if prepared)
- Each SSO will be of varying size and type. Depending on the severity of the event and actions taken, each will demand a varying level of documentation. In all cases provide enough documentation to provide an accurate representation of the event, conditions, and actions taken for future reference.

SEWER STATION ALARM PROCEDURES (ALARM TYPE AND RESPONSE)

(All Alarm Situations Are Unique. Response Actions Below Provide General Guidance)

(Actions At Time Of Any Alarm Shall Be Performed And Prioritized By The Responding Party According To Their Judgment. Response Shall Be Based On Type Of Alarm, Site & Environmental Condition(S), And Facility Needs At Time Of Alarm)

Station Alarms are generated via District's SCADA and Sensaphone Auto-dialer systems. Alarms are routed to on-call technician.

Alarm Types and Procedures below address only the emergency condition alarms requiring urgent response. The system also has some pre warning alarms that will alert the tech on call to take preemptive actions to avoid critical problems.

Other informational alarms, which may occur, requiring less urgent responses are also incorporated into SCADA and Auto-dialer system. These informational alarms are not addressed in this emergency response procedures.

The below table provides a list of stations and emergency alarms available at each site.

Station	Flow	Type of Station	Type of Level Indicator	SCADA Alarms (Ignition)							Auto-dialer Alarms (RACO)					
				Communications Fail	Drywell Flooded	Loss of Power	High Wet Well	Loss of Level Indicator / Control Fail	Help Needed	Emergency Power On	Communications Fail	Drywell Flooded	Loss of Power	High Wet Well	Help Needed	Emergency Power On
Secline	High	Main	Sonic	A	B	C	D	E	F	G	A	B	C	D	F	G
National	High	Main	Bubbler	A	B	C	D	E	F	G	A	B	C	D	F	G
Carnelian	High	Main	Sonic	A	B	C	D	E	F	G	A	B	C	D	F	G
Dollar	High	Main	Sonic	A	B	C	D	E	F	G	A	B	C	D	F	G
S1	Low	15	Float	A	N/A	C	D	E	F	N/A	A	N/A	C	D	N/A	N/A
S2	Low	15	Float	A	N/A	C	D	E	F	N/A	No Auto-dialer					
N1	High	16	Transducer	A	B	C	D	E	F	G	A	B	C	D	F	G
N2	Low	15	Float	A	N/A	C	D	E	F	N/A	A	N/A	C	D	N/A	N/A
N3	Low	16	Transducer	A	B	C	D	E	F	G	A	B	C	D	F	G
C1	High	16	Transducer	A	B	C	D	E	F	N/A	A	B	C	D	F	N/A
C2	High	16	Transducer	A	B	C	D	E	F	G	A	B	C	D	F	G
D1	Low	16	Transducer	A	B	C	D	E	F	N/A	A	B	C	D	F	N/A
D2	High	15	Float	A	N/A	C	D	E	F	N/A	A	N/A	C	D	N/A	N/A
D3	High	16	Transducer	A	B	C	D	E	F	N/A	A	B	C	D	F	N/A
D4	High	16	Transducer	A	B	C	D	E	F	N/A	A	B	C	D	F	N/A
D5	Low	15	Float	A	N/A	C	D	E	F	N/A	No Auto-dialer					
D6	High	16	Transducer	A	B	C	D	E	F	N/A	A	B	C	D	F	N/A
D7	Low	16	Transducer	A	B	C	D	E	F	N/A	No Auto-dialer					
Mashie	Low	Residential		No SCADA							A	B	C	D	F	N/A
Park Restroom	Low	Residential		No SCADA (Alarm Bell)							No Auto-dialer (Alarm Bell)					

Alarm Type & Response:

After notification of alarm, from SCADA or Auto-dialer, respond to remote SCADA interface, base, or directly to site to determine the nature and/or location. Alarms generated from SCADA are documented with the SCADA historian. Alarms generated from the Sensaphone Auto-dialer are documented with Sensaphone

COMMUNICATION FAIL SCADA

Communication Failure Alarms generated from SCADA occur in the event a transfer of data (from remote site to SCADA server) does not occur within the time frame set. These time frames may vary, depending on nature of site. Typically, they are set anywhere between 120 to 1000 seconds. Communication Failure Alarms generated from Auto-dialer occur if the remote sites cell phone is not operational.

ACTION: A (See attached table from first page).

- 1) Initiate a station visitation schedule to verify that the station is operating properly.
- 2) Station visitation checks shall be performed per the following guideline.

Main Stations: Stations should be checked in rotation as quickly as possible, aiming for a goal of each station once an hour. If a problem is found, continue to operate station and call for assistance.

High Flow Satellite Stations: High flow satellites as listed in above table should be checked in rotation as quickly as possible, aiming for every three (3) hours. If necessary, additional assistance may be called in to aid in station checks.

Low Flow Satellite Stations: Low flow satellites as listed in above table should be checked every 12 hours.

- 3) Continue visitation schedule until full communication is restored.
- 4) May need to reboot main server and RTU at Kingswood Tank.
- 5) Confirm Sensaphone Auto-dialer is functional.

DRYWELL FLOODED ALARM

Or also called Plant Flooded alarms are generated when float in drywell is tripped. Alarm goes to the tech.

ACTION: B (See attached table from first page).

- 1) Call out sewer crew (vacuum truck driver and standby sewer crew) to mobilize and set-up portable pumps as required to pump down the dry well and wet well. Turn off drywell power (shunt trip) or turn off drywell breaker located in station service panel before entering drywell. Pump dry well into wet well, or into vacuum truck or downstream manhole. Continue pumping until source of liquid entering drywell is controlled.
- 2) Make contact with the Duty Supervisor as soon as possible and inform . If initial contact is not made, continue trying on a frequent basis until contact is made. Continue to station to verify condition. Notify contacted personnel of verification as applicable (false alarm, response activities, etc.)

- 3) After drywell is pumped down, isolate leak, you may have to close the suction and discharge valves of the pump that is leaking. This is a confined space entry. Air units and bio-system tester must be utilized.
- 4) All leakage should be stopped at this time.
- 5) Clean up station drywell, inspect and correct any damage to station electrical before placing equipment back in service

COMMERCIAL POWER OUTAGES

Commercial Power at site is out.

ACTION: C (See attached table from first page).

o DOLLAR HILL

- 1) Visually check to insure the generator is running and is loaded. If running, the site shall be monitored for continued performance as required.
- 2) Check for normal voltage (480) and some current on the generator control panel.
- 3) Check all circuit breakers for tripping and motor controls for overloads tripped.
- 4) Check fuel levels.
- 5) If no power and no generator won't start, contact the Duty Supervisor immediately.
- 6) If generator is not running and no power, use the generator control panel to read why it failed to start. It can be reset and will try to start three more times.
- 7) Visually check wet well level.
- 8) There is no maximum load at this station. The utility and the generator will run all four pumps with their normal VFD controllers.
- 9) Dollar Addition has the Kohler Generator on location and it can be hooked up and run the Dollar Addition on manual breaker control, or moved it to the back of control building and hook up to run main pump station.

o CARNELIAN, NATIONAL, SECLINE (Secline & Carnelian have Cannon plug)

- 1) Visually check to insure generator is running and is loaded. If running, the site shall be monitored for continued performance as required.
- 2) Check all circuit breakers for tripping and motor controls for overloads tripped.
- 3) Check natural gas pressures
- 4) Check wet well level.
- 5) If no power and generator won't start, contact the Duty Supervisor immediately.
- 6) Carnelian and National Ave has a Cannon plug for pumps and main station (200/100 amp), can run with either Kohler (#989) or Perkins (#990) portable Generators.

AFTER RETURN OF POWER

- 1) All generators should shut off automatically after a 15 to 30-minute cool down (set point previously determined by District).
- 2) Generator run lights should then clear from SCADA.

○ **SATELLITE STATIONS**

- STANDBY EMERGENCY GENERATORS: Call "On Call Sewer Ops". Emergency generators should be started and ready to respond to satellite stations as soon as possible. Before dispatching a generator to any satellite station check the mobile generator oil level and make certain that there is a full fuel tank. All generators should leave the yard running with beacon lights on and safety chain attached.
- Satellites **without stationary generators** are listed by flow priority: (Priority list established based on peak flow into station relative to volume of wet well, i.e. time to overflow): Dispatch will be based on SCADA monitoring.

- | | |
|-------|--------|
| 1) D3 | 6) D2 |
| 2) D4 | 7) S2 |
| 3) C1 | 8) D1 |
| 4) N2 | 9) D5 |
| 5) S1 | 10) D7 |

- Satellites **with stationary generators** shall be checked and verified stationary site generation power is in operation, once verified power and pump operation is correct, continue to next station. Satellites with stationary generators: N1, C2, N3, D6

- **TRANSFERRING EMERGENCY POWER TO STATION**

- 1) Check to make sure main circuit breaker from generator is turned off.
- 2) Plug cable into station receptacle.
- 3) Turn station switch from commercial power to emergency power.
- 4) Turn main circuit breaker from generator on.
- 5) Check drywell to insure station is powered and pumping.
- 6) Technician verify pump down.

- **RE-TRANSFER TO COMMERCIAL POWER**

- 1) Turn main circuit breaker from generator off.
- 2) Turn station switch from emergency power to commercial power.
- 3) Unplug cable from station receptacle.
- 4) Turn generator off upon returning to base.
- 5) Gas unit up and check oil level.

<u>STATION</u>	<u>LOCATION</u>	<u>PLUG LOCATION</u>	<u>SWITCH TYPE</u>
S1 & S2	9890 Speedboat	Bottom Of Panel	Rotary
N1	7500 North Lake	Stationary Generator	Automatic
N2	6542 North Lake	Stationary Generator	Knife Switch
N3	6061 North Lake	Front Of Panel	Automatic
C1	5440 North Lake	Bottom Of Panel	Dual Breaker, Slide Bar
C2	5000 North Lake	Stationary Generator	Automatic

D1	4600 North Lake	Bottom Of Panel	Dual Breaker, Slide Bar
D2	4360 North Lake	Bottom Of Panel	Dual Breaker , Slide Bar
D3	4240 North Lake	Bottom Of Panel	Dual Breaker, Slide Bar
D4	4000 North Lake	Bottom Of Panel	Dual Breaker, Slide Bar
D5	3740 North Lake	Bottom Of Panel	Dual Breaker, Slide Bar
D6	24/25 Chinquapin	Rear Of \$ Station, 480 Volt Gen Only	Dual Breaker, Slide Bar
D7	280 Observation	Power pedestal on road	Dual Breaker, Slide Bar

HIGH WET WELL

ACTION: D (See attached table from first page).

- **DOLLAR MAIN, DOLLAR ADDITION, CARNELIAN, NATIONAL**
 - 1) Visually check wet well level
 - 2) If pumps do not start in auto, turn H.O.A. switch to "Hand". Pumps should now start and variable speed pumps can be flow matched with the Q-cell bleed valves as necessary. (Q-cell and Manual speed control no longer applicable at Dollar)
 - 3) Check the main circuit breaker and voltage meter to right of the breaker for a tripped condition and proper voltage. If voltage is more than 10% high or low, notify Liberty Energy.
 - 4) Check station pump running lights. If they are dim or out, push resets on motor starter. Lights may be dim due to losing 1 leg of the three-phase. Check power on main feed for each leg)
 - 5) Check and or reset all pump circuit breakers.
 - 6) (for National SLS Only) Check Q-cell high temperature reset. Check water level on Q-cell and temperature of Q-cells. Temperature should be between 90-120 degrees F.
 - 7) (for National SLS Only) Check bubbler air compressors, and SCFH rotameter in bubbler panel. The SCFH rotameter should be set at 2. If there is a small leak in compressor system then set to 3.
 - 8) Make a visual check of fuses, circuit breakers and control cabinets for obvious damage.

- **SECLINE MAIN**
 - 1) Visually check wet well level. Confirm pump will run in hand pump down if needed.
 - 2) Check station main breaker and incoming power for proper voltage. If incoming power is more than 10% high or low, call Liberty Energy.
 - 3) Check and reset pump breakers and push pump resets.
 - 4) Call (Duty Supervisor) for emergency bypass and vacuum trucks.

- **MODEL 16 STATIONS - N1, N3, C1, C2, D1, D3, D4, D6, D7**
 - 1) Visually confirm high wet well. Confirm pump will run in hand pump down if needed

- 2) Visually check for flooded drywell. If drywell flooded, refer to "Drywell Flooded Procedure".
 - 3) Check circuit breakers and pump resets.
 - 4) Turn H.O.A. switch to hand to pump wet well down. If necessary, operate station manually until problem is resolved and corrected.
 - 5) Call (Duty Supervisor) for emergency bypass and vacuum trucks.
- **MODEL 15 STATIONS - S1, S2, N2, D2, D5**
 - 1) Visually confirm high wet well. Confirm pump will run in hand pump down if needed
 - 2) Check station circuit breakers and pump resets.
 - 3) Tip all three pump control floats (enable, lead, lag). Sonic start prime system will automatically keep pumps primed at all times.
 - 4) If vacuum pump fails to draw prime, close discharge plug valve and try again.
 - 5) If vacuum pump still fails to draw prime, close stop valve in vacuum system to check operation of vacuum pump. Replace if necessary.
 - 6) Call (Duty Supervisor) for emergency bypass and vacuum trucks.

LOSS OF LEVEL INDICATOR

o Control Fail

Control Fail alarm is a wet well level set point that can be changed on the plc. The level is normally set between lead pump and lag pump start, there are several factors that can trip this alarm, plugged pump, high flow, or level transmitting devices could be dirty and Plc failure.

Visually check for high wet well. Confirm pump will run in hand pump.

Level indicator not functioning or seen by SCADA.

ACTION: E (See attached table from first page).

o PRESSURE TRANSDUCER SYSTEM (All Model 16)

- 1) Visually check for high wet well. Confirm pump will run in hand pump down if needed
- 2) Model 16 satellites P.L.C. may lock up, you can tell by the H.M.I. screen, if this happens you will need to rest power to whole system.
- 3) Check voltage to Transducer then milliamp's from transducer. Replace if needed.
- 4) National and Carnelian pump control are from Pressure transducer and pressure switch transducer is level monitoring only.
- 5) Model 15 satellites pump control is from float system transducer is level monitoring only.
- 6) **Note:** All systems have an all pumps run Float Bypass feature. Confirm pumps are operational replace transducer or repair system if parts available.

- **ULTRASONIC TRANSDUCER SYSTEM (Dollar, National Carnelian, Secline Main)**
 - 1) Visually check for high wet well. Confirm pump will run in hand pump down if needed
 - 2) Check power to device 120 volts and 24 volt D.C. If ok check Manual for any alarm codes. Dollar Main has a backup device on the Dollar Addition wet well that can run the station, or you can run it on Float Bypass System. Secline will run on the Float Bypass system only.
- **FLOAT SYSTEM**
 - 1) Visually check for high wet well. Confirm pump will run in hand, pump down if needed.
 - 2) Make sure all floats are free, clear and operational, replace if needed.
 - 3) Confirm all pumps are not plugged, if so clear.
 - 4) P.L.C. may lock up, you can tell by the H.M.I. screen, if this happens you will need to rest power to whole system.
 - 5) Confirm transducer or level transmitting devices are free, clear, clean, and reading properly.
 - 6) Check set points and trending to confirm flow into station.

HELP NEEDED

ACTION: F (See attached table from first page).

Indicating field personnel has called for help at site.

Respond to Site Immediately

EMERGENCY POWER ON

ACTION: G (See attached table from first page).

Indicating emergency power is running.

If commercial power is out, and Emergency Power is not running. Respond to Site with portable generator Immediately

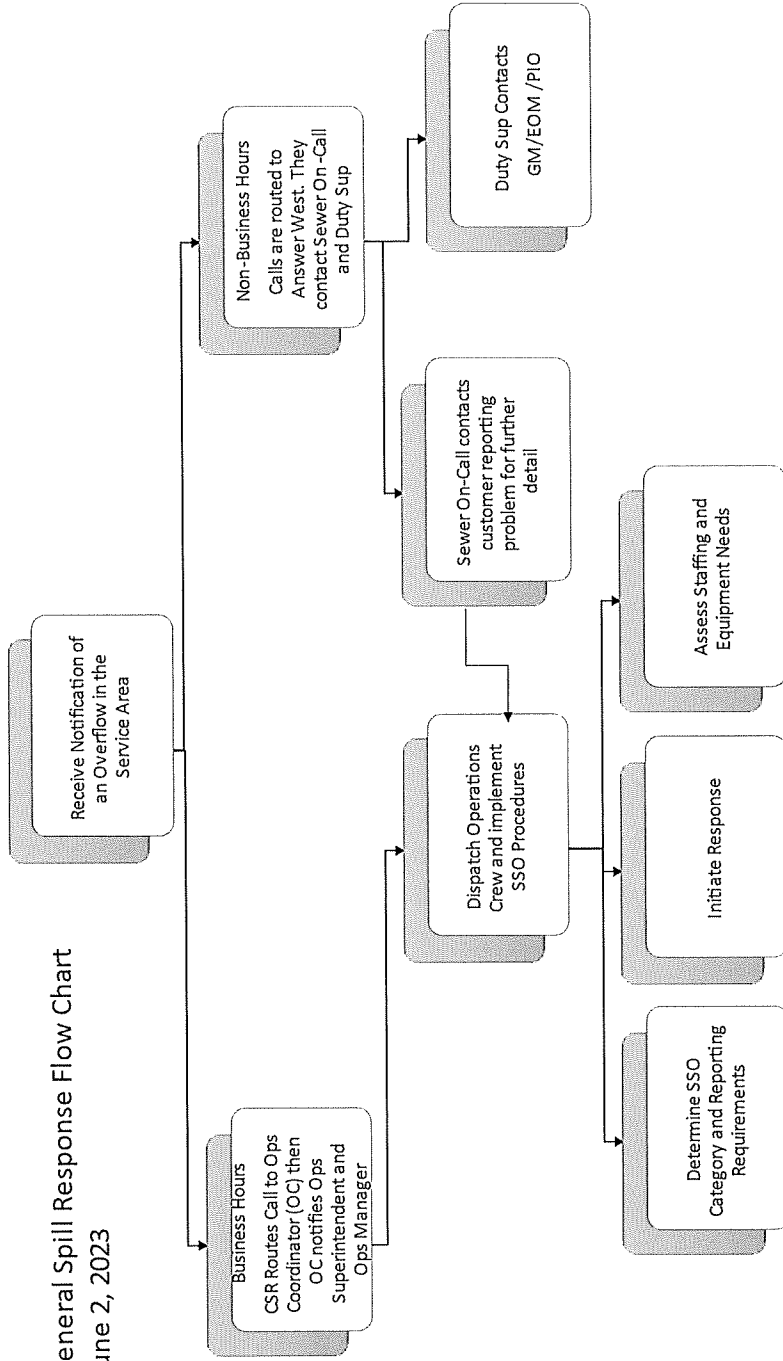
Detailed Tasks per NTPUD Emergency Response Plan (ERP)

Tasks Modified to Meet Current Requirements

Following Pages:

- General Response Flow Chart
- Detailed Response Task

General Spill Response Flow Chart
June 2, 2023



Detailed Response Tasks

See Flowchart for Categories Relating to Below Tasks and Generalized Order of Response.

(All Events are unique in nature. The flowchart and tasks provided are only a guide. Tasks shall be prioritized as required depending on the event and professional judgment.)

TASK 1: Answering Service

Off Duty Hours: Anyone trying to reach the District to report a problem or an alarm condition occurring at any District facility (sewer or water) will initiate a response from the Answering Service. The answering service will initiate a call to the necessary standby personnel (either sewer or water). If a message is left and no response is received within Fifteen (15) minutes, the answering service will call the other on-call phone (either sewer or water) and call the duty supervisor. The answering service is also supplied with an up-to-date list of phone numbers for all District employees should initial notification fail.

Normal Work Hours: Problems or alarms will be handled by office personnel. At this stage the necessary personnel will be dispatched from the Operations and Maintenance teams.

TASK 2: Standby Personnel Responds

Standby personnel will receive a call from the answering service (plugged sewer line, watermain leak, manhole overflowing, etc.) or via direct alarms out of station(s) SCADA. The answering service is instructed to gather pertinent information to relay to standby personnel as required (sewer, water, or station technician). For SCADA alarms, the standby technician will immediately go to SCADA Control to determine the exact location and the type of alarm. After review of SCADA Control, the standby technician will respond as necessary to the reported problem area if required. If the facility sending the alarm is closer in vicinity to the standby technician, the site may be visited first.

It is the responsibility of the first person responding to the call or alarm to determine the validity of the problem. This person will confirm that sewage is backed up or that a watermain is leaking as opposed to ground water surfacing or bubbling up from some other type of source. If a problem is determined to exist, that person's next responsibility is to establish whether or not the problem relates to the North Tahoe Public Utility District Facility.

The most common Non-District problem is that of a blocked house service lateral. The standby person will check the sewer collection lines to ensure that they are flowing to help establish the responsibility of the problem. Another common Non-District problem is a report of a manhole overflowing when it is in fact a telephone company vault surcharged with groundwater. In all cases, the total effect of any problem should be thoroughly investigated as it may or may not relate to and/or affect other parts of the system.

In all cases, standby personnel shall be actively engaged in response activity within 10 minutes of being notified. Actual site arrival will depend on location and other factors outside personnel's control (weather, traffic, etc.). All on-call personnel have required response times to report to the NTPUD Base facilities under normal conditions.

TASK 3: Contact Property Owner

Following the determination that a Non-District problem does exist; the standby person shall make contact with person or party responsible for the problem. Example: such as the property owner in the case of a property line cleanout overflowing or the appropriate utility in the case of ground water surfacing from their facility.

To avoid unnecessary calls regarding the same incident, the Answering Service or NTPUD Office should be notified of the exact location and the nature of the problem.

If the property owner or other responsible party cannot be reached, then the standby person shall initiate a work order for the Office Staff to contact the Owner during normal business hours.

TASK 4: Notify Health Department and California Office of Emergency Services

Non-District Spill: If sewage or other hazardous materials are spilling or have spilled from facilities other than the Districts, the **Placer County Environmental Health Department** shall be notified if necessary. Notification is only required when responsible party is nonresponsive in correction/cleanup activity and/or if quantity and/or spill location is of a nature to warrant engaging the County to enforce corrective action. See tab 1 for contact information.

In all cases, if the quantity and/or spill location is of significant nature, the County Environmental Health Department as well as other agencies shall be notified as required. See Task 6 below, and Tab 3 of this document.

Voluntary Notification of Spills from Privately-Owned Laterals and/or Systems to the California Office of Emergency Services.

Upon observing or acquiring knowledge of any of the following from a private sewer lateral or private sanitary sewer system that is not owned/operated by the NTPUD, the Enrollee is encouraged to notify the California Office of Emergency Services (as provided by Health and Safety Code section 5410 et. seq. and Water Code section 13271), or inform the responsible party that State law requires such notification to the Office of Emergency Services by any person that causes or allows a sewage discharge to waters of the State:

- A spill equal to 1,000 gallons or more that discharges (or has a potential to discharge) to waters of the State, or a drainage conveyance system that discharges to waters of the State; or
- A spill of any volume to surface waters

TASK 5: Notify Supervisor

The Duty Supervisor shall be notified that a spill is in progress or is imminent. In coordination and cooperation with the responding personnel, the Duty Supervisor and responding personnel shall assemble manpower, contact mutual aid districts, gather equipment, etc. as necessary to clear problem, stop and/or prevent a spill. All events are different; however in all cases it is the

Duty Supervisor's position to alleviate coordination, notification, and/or logistical demands (phone calls, etc.) from the responding operations and/or technician crew personnel. The responding crew members can therefore focus on fixing the problem at hand without losing time on the phone, etc. Although this is the goal, responding crew personnel will know in greater detail the exact equipment and/or manpower needed to handle the event, therefore close coordination between all parties is paramount.

TASK 6: Notify Agencies

The Duty Supervisor shall notify or report as required per Tab 2, Emergency Response Procedure, Statewide Sanitary Sewer Systems General Order 2022-0103-DWQ, Attachment E2 – Summary Of Notification, Monitoring And Reporting Requirements. To ensure adequate notification, and as a courtesy (although not required per State MRP) Duty Supervisor shall also notify Lahontan Water Quality Control Board, the Placer County Environmental Health Department, and TRPA using same timeframe guidelines as outlined in Tab 2 of this document. See Tab 1 for contact information.

TASK 7: Clear Blockages

If a blockage occurs within a street the first course of action is to set up the proper traffic controls to insure the safety of NTPUD workers and the public.

Hydraulic jet flushing is used initially on a sewer line blockage. The District owns two (2) combination sewer cleaning machines, 5 yard and 11 yard. Setting up at the manhole immediately downstream of the blockage and utilizing a sewer jetting nozzle will usually dislodge the blockage. Failure of all attempts to clear the line will necessitate the excavation of the sewer line at the location of the blockage.

TASK 8: Call in All Personnel

The Duty Supervisor shall cause all District personnel to be called in to fill projected manpower requirements. The Duty Supervisor shall also be empowered to substitute manpower from **Mutual Aid Districts** if a sufficient number of District personnel are not available.

TASK 9: Notify Mutual Aid Districts

The Duty Supervisor, or other authorized employee from NTPUD, shall notify appropriate **Mutual Aid Districts** that an emergency exists. The responding agency will be informed of resources needed (personnel, equipment, supplies, etc.) and inform the requesting District of the timeframe it will take to assemble those resources. The Duty Supervisor is required to keep a log of all persons contacted, what resources are available, and note any equipment from the Aid agreement which may not be in service at that time. **See Tab 1 for contact information and/or Tab 6 for available equipment**

TASK 10: Containment (and/or diversion) of Flow

In any spill situation, containment of the spill can simplify and expedite the clean-up process, prevent siltation, limit public exposure and related health hazards, and avoid costly property damage. While not all spills can be contained, the procedures to be used will provide some mitigation of the effects. NTPUD maintains a stock of **wattle (fiber rolls), filled and unfilled sandbags, and material bin of sand**. Immediately below the spill, workers will deploy all containment and/or diversion measures as applicable to best contain and/or handle the flow.

An impermeable dam to hold back as much flow as possible shall be constructed using

sandbags with overlapping joints. The height should be kept to a maximum of three feet with a spillway provided to relieve pressure on the structure should it become completely filled. If the flow is too great or the topography is too flat to accommodate a dam structure, a backhoe can be used to form a retention basin. Extreme caution should be used since there will probably be no time available for location of underground facilities. A deeper hole is preferable to a shallow large hole because some percolation will lessen the volume to handle. High groundwater, evident at the commencement of digging will necessitate a holding facility with a greater surface area for an equivalent volume.

TASK 11: Switch Force Mains (Dollar Only)

Dollar Force Main system is comprised of two parallel force mains (16" DIP installed in 1993 & and 18" (O.D.) HDPE slip-lined inside 22" mortar lined steel in 2015). A valve cluster in the pump station asphalt area allows ultimate flexibility to operate under any pumping scenario relative to both pump stations (Dollar Main and/or Dollar Addition). Either or both forcemains may be operated with either or both pump stations.

A schematic of the valve cluster, with valves numbered, is maintained at the station taped to the inside of the control building door. This may be referenced to operation either or both force mains depending on desired condition. Together with this schematic is a table referencing valve number and position (open or closed) clarifying which force main is in operation depending on desired condition.

TASK 12: Set Up Pumps and Hoses

The District has a number of portable pumps and hoses with capacities ranging from a 40 gpm trash pump (with 1.5" discharge) to 2,000 gpm dri-prime (with 6" discharge). The applicable pump(s), hoses and fittings shall be deployed to location(s) as required to handle flows.

If blocked gravity line or overflow at manhole, the pump should be parked as close to the manhole above the blockage as possible. The hose should then be run either down the shoulder or centerline of the street to the first free running manhole.

If the manhole is in a location inaccessible by truck, gas driven pumps will have to be hand carried to remote manholes and setup in a similar manner to that described above (i.e. to the next free running manhole).

If blocked force main, employ use of existing bypass valves on National or Carnelian forcemains. District Operations crew personnel are trained in the location of bypass valves and maps are available in District vehicles.

TASK 13: Pump Around the Blockage

Pumping shall be started immediately upon completion of the installation of pumps and discharge hoses. The pumps, hoses and manhole levels shall be continually monitored for satisfactory operation with particular attention being paid to changing conditions and the safety of the public. If blocked force main, employ use of existing bypass valves on National or Carnelian force mains. District personnel are trained in the location of bypass valves and maps are available in District vehicles.

TASK 14: Clean Up the Area

Subsequent to a spill of hazardous materials, the affected area may have to be quarantined and

will have to be cleaned up. For all but sewage or chemicals used within the sewer or water system the cleanup will be handled by individuals trained to respond to these types of spills. The District shall insure that materials detrimental to the sewer system or treatment processes are not indiscriminately disposed of into the sewer system.

For sewage spills the affected area will be disinfected by the use of a chlorine compound and or caustic soda to kill ant pathogenic bacteria that may be present. If the spill site is near a water course or Lake Tahoe, the use of disinfectants shall only be permitted when there is a possibility of direct sewage contamination of a public water, contact area, or domestic water source. Monitoring of disinfectant dosage amounts released into the environment is very important such that wildlife will not be needlessly impacted. All physical evidence and/or impacts of a sewage spill shall be removed such as water tracks, solids and pond areas.

If the spill area is a public beach, District is responsible for printing and posting signs to prevent any human contact with the contaminated water. Signs shall be left in place until the appropriate Health Agencies have approved their removal.

TASK 15: Prepare Report

The report shall be factual using a format stressing what, when, where and why. The report shall contain the cause(s) of the problem and what measures will be taken in the future to prevent a reoccurrence, if any are applicable. If the procedures contained herein require modification, the conclusions should address the necessary changes. The Report shall be coordinated with the General Manager and District Engineer. The appropriate managers will then receive a report from the Duty Supervisor on the emergency activities.

Tab 3 provides reporting requirements as required by Statewide Sanitary Sewer Systems General Order 2022-0103-DWQ

TASK 16: Regulate Upstream Flows

Two (2) methods of regulating the upstream sewage flow are available. Either the stations can be set to flow match or manually operated. Flow matching provides for steadier flow rates and results in less surges. The manual operation allows for temporary interruptions in the flow but may cause surges in the piping system and the need for more pumps running at downstream stations to evacuate their wet wells. If the stations are run manually, each main station should be physically monitored and controlled. Two-way radio communications should be made with repair personnel to coordinate flows with repair activities.

Applicable to main sewage pump stations, this procedure will allow for slow steady flows or temporary flow interruptions at downstream locations. Utilizing radios, each of the upstream main pumping stations are manned and operated in manual mode. With upstream monitoring of the incoming flow and well levels and coordinating pumping needs/times with repair of bypass activities downstream, manual pumping at the stations can proceed without a spill.

Personnel knowledgeable in the operation of pump stations must be used in these emergency situations.

TASK 17: Begin Laying Bypass

Lay the bypass hose and place along/ parallel to the damaged/ plugged section of the force main or gravity main. Employ bypass valves or pumps as required.

Lay-flat pressure rated hose: 3,835' - 10" (150 psi working pressure) (250 psi burst pressure)
600' - 8" (225 psi working pressure) (450 psi burst pressure)

Deliver proper equipment on pallets to appropriate sites. Hardware, elbows, and fittings (Victaulic couplings on each end) for use of the bypass hose is stored at the District on pallets for ease of loading and handling. The hose is stored on two hydraulically powered reels with dividers between each hose section. The reels are on a trailer mounted A-frame for deployment and retrieval. Trailer is tandem axle with engine and hydraulic power for use in operating the reel system.

A ramp is available for vehicle crossing if necessary. Multiple crossings require "leapfrogging" the ramp as required. Hose shall be monitored to ensure no erroneous crossings are made by the general public and hose remains in operational condition.

Traffic Controls are to be established along the section to be bypassed in accordance with Cal Trans Protection for Workers.

TASK 18: Install Pumps and Pipe

Install appropriate pumping, charging and discharge appurtenances.

Pressurize the bypass piping with fresh water to seat the gaskets. If the severity of the force main leak dictates, the bypass piping shall be charged directly from the force main to avoid an excessive loss of sewage.

Prime and check pump by circulating wastewater to wet well.

Repair any leaks in joints or pipe.

TASK 19: Begin Bypass Pumping

Operate pumps or pump stations in flow match mode to avoid on/off pressure surges. Manual operation of the Districts or others portable pumps is necessary. As noted in Task 16, steady flow is preferential to on/off flow fluctuations and surges. Radio communications will be necessary if upstream pump stations are run in the on/off mode.

If there is a failure on National or Carnelian forcemains, open the appropriate 12-inch bypass valves to allow the wastewater to flow in parallel through the bypass piping and past the damaged section of force main.

Always continue to check for leaks.

Close the main in line bypass valves. The damaged section is now isolated.

Drain the isolated section through secondary 12-inch bypass valves to tank trucks or to a gravity sewer system.

TASK 20: Discontinue Bypass

Close the upstream 12-inch bypass valve and flush the bypass piping with fresh water.

Charge the bypass piping with 50ppm of chlorine and hold for three (3) hours.
Flush the bypass piping to tank trucks or a gravity sewer.

Release pressure and allow fresh water to drain from piping into a wet well or a manhole.

Pick up the piping and clean up.

TASK 21: Shut Off Water (If necessary in extreme emergencies)

If possible and/or applicable to eliminate or restrict source water, a large contributor or residence may be shut down or restricted. If restriction is necessary, flows shall be reduced to a point without causing potential damage or contamination issues in the potable water system which would otherwise not be a threat with a full system.

Large scale shutdown of District supply, storage, and distribution system will only occur in the most extreme of circumstances and would require the notification of California State Department of Public Health and the Placer County Environmental Health Services. Due to other detrimental effects associated with potable water systems, such as vacuum conditions, cross contamination, and bacterial exposure concerns, shut down and emptying of the water distribution system will only be initiated in an extreme event. Any spill event of this magnitude will, by default, require notification to Cal OES (see Tab 3) at which point they will likely step in and dictate proper response.

The realities of a large-scale shutdown and draining of the District's distribution system are it would likely do more harm than good, for reasons stated above. In addition, this task could only be done by personnel knowledgeable in the dynamics of the systems components and operations. The manpower and experienced personnel it would take to perform such a feat would be best utilized responding to and implementing corrective actions to the actual spill event.

If this most extreme of events were necessary and dictated by Cal OES, the District's systems would be shut down by shutting off lake intakes and closing source valves, then opening hydrants immediately below the water tanks and the slowly shutting off the discharge valves of the tanks. To speed the draining process, hydrants along State Highway 28 would be opened. Extreme care must be taken to prevent collapse of watermains due to vacuum conditions. Only those personnel knowledgeable in the operation of domestic water systems shall be assigned these duties.

Since great volumes of lightly chlorinated water would be discharged into the environment, hydrants draining directly into water courses should be avoided.

TASK 22: Tank Truck Brigade

The Onsite Coordinator shall initiate a tank truck brigade. The District will locate two (2) truck filler assemblies at the spill locations based on ease of operation. Vacuum trucks can be used prior to the arrival of tank trucks to transport sewage. When the trucks arrive they must be staggered to get the best efficiency. A few extra minutes spent setting the pace of operations will result in more sewage transported more efficiently.

One or more manholes downstream of the spill location will be designated for dumping of the tankers. Personnel will be assigned to standby at the dump site if it is a hazardous situation or has a potential for a public health hazard. Manhole Dump maps providing appropriate dump sites (easy access, avoids surcharging of adjacent properties, etc) are provided in tab 7.

This procedure will remain in place until normal pumping operations resume.

TASK 23: Begin Excavation

The first action will be to establish siltation control down gradient of all areas where repair activities or material stockpiling will take place. The District maintains a stock of erosion fencing designed for this purpose.

Traffic controls must be established in accordance with **Caltrans or Placer County Standards**, per **Caltrans Protection of Workers**. The work area, designated by erosion protection measures and traffic control devices, must be of sufficient size to allow the necessary service vehicles, pumps and excavation equipment safe working room around the repair. Consideration must be given to additional room required for portable generators and light sets that may be needed for night work.

If the site does not have an established perimeter by implementing the above activities, additional efforts should be made to cordon off the work site to prevent curious onlookers from endangering themselves or the operation.

The conditions at the particular location will dictate what procedures are used for trench safety. Presumably some areas will be totally saturated. This material must be removed. If the area of saturation is limited, shoring may be used in accordance with the Districts Standards. Hydraulic quick shores with a maximum depth of 12' and width of 72" are in the Districts equipment.

It is likely that the soil will be saturated to such an extent that the shoring will be impossible or risky at best. A larger excavation will therefore be required with side slopes cut back to 1:1 (45 degrees) minimum dimensions. A minimum of two (2) ladders shall be provided for ingress and egress to the pipeline.

The excavation will be subject to the discharge from the leaks or breach and may be subject to groundwater inflow into the excavation. Over excavation in portions of the total excavation provide a sump for pump suction hoses. Drain rock backfill over the suction hose strainers will help to prevent clogging. More than one suction hose or strainer should be available to allow pumping to continue unabated should an intake clog.

In virtually all locations there are gravity sewer mains which may handle the dewatering. The system maps, copies which are located in District vehicles, must be reviewed to determine the direction and the length of pipes and hoses to dispose of the sewage/groundwater. Gravity sections so used will be subject to high volumes of silt and earthen materials which may clog the lines, wet wells and suction pipes of pump stations. Periodic inspection must be made of the system to prevent additional system failures.

TASK 24: Effect Repairs

The exact nature of the repair will be dependent on the nature of the break. It may take the form of a patch or of a full circle clamp.

The initial action will be to cease the discharge of sewage by plugging or covering the hole. The second action will be to insure the longevity of the repair by welding or use of compression fittings to permanently seal the repair.

TASK 25: Pressure Test Line

Due to the critical nature and operating pressures of the Dollar Forcemain, the forcemain and the repaired section should be monitored during filling for leaks and brought to full operating pressure before final backfill.

TASK 26: Resume Normal Pumping

Set the pumps to automatic and observe through several pump cycles. Leave emergency equipment in place until satisfactory performance is assured.

TASK 27: Restore Water Service (If required per Task 21 – Extreme Situation)

Because of the age and condition of the water system, extreme caution must be used in refilling the lines. First, the hydrants at the lower end of the system along Hwy 28 should be closed and the lake pump stations turned on. The hydrants at the top of the system should remain open to let air in the system escape. When the level reaches these hydrants the tank valves may be opened and the hydrants closed slowly. Office personnel will have to be alerted to the complaints that will result from turbid and brackish water.

TASK 28: Pump Into Collection System

It may be necessary to dewater the repair excavation both because of groundwater entering the hole and the sewage. Sufficient redundancy of pump capability should be maintained on site to avoid pumping interruptions and possible disruption of repair activities.

A 6" gravity sewer at 2% slope will theoretically accommodate the discharge of one typical District hydraulic pump. A flatter slope or significant existing flow in the line will result in a discharge of the manhole. Constant monitoring of the collection system will be required.

TASK 29: Monitor SCADA System

In the case of a power outage which affects more than a single station or location, SCADA will be monitored. The function of the person monitoring SCADA is to relay by radio any change of status to field personnel who may then establish priorities to prevent any spills.

TASK 30: Mobilize Satellite Generators

The District maintains towable portable generators to supply emergency power to the satellite sewage stations. Generators are stationed at various locations throughout the District.

Generally speaking, locations and generator size/type are chosen as applicable to minimize response time to facilities in potential need of power generation. District personnel knowledge of generator locations and types shall be engaged as required. In all cases generators are kept fueled at all times and checked periodically by the fleet manager to ensure operation.

TASK 31: Staff Main Stations

Staff will operate each sewer main pump station until normal operations are verified and/or generator power is verified as smoothly operating. Staff will respond to other areas in need of emergency response to ensure continuity of operations. Constant communication is maintained with Onsite Coordinator to maintain site response priorities and best use of personnel and equipment resources.

TASK 32: Alternately Pump Satellites

Certain satellite pump stations have high flows and therefore require quick and frequent pumping cycles to avoid spills or property damage. The **flow** priority relying on emergency power at satellites is as follows: **N-1, C-2, D-3, D-4, C-1, D-6, D-2, S-1, S-2, D-5, D-1, D-7, N-2, and N-3**. A small house system on Mashie Avenue may be pumped by the Vacuum Truck during a prolonged power outage.

Satellite stations **N-1, C-2, N-3, and D-6** have **stationary generators** at the respective sites. SCADA shall be monitored, and sites quickly visited (if required), to ensure proper operation of stationary generators at these sites. Assuming operation of stationary generator, portable generation will not be required for these sites.

Applicable towable portable generators capable of alternating the satellites will be dispatched to the applicable sites in need of power generation. Sites will be leapfrogged as required depending on flow priority.

TASK 33: Maintain Through Power Restoration

The alternate visitation of satellites by the standby generators shall continue through the restoration of commercial power. Additionally, personnel from **Mutual Aid Districts** not affected by the power outage will have to be brought in to relieve crews. The Base Facilities have a standby generator to maintain continuity of operations.

TASK 34: Vacuum Truck Transport

A failure to maintain pumping at all satellites will be readily apparent on the SCADA Monitors. There is sufficient reaction time built into the system by the conservative location of the high wet well alarms to allow the vacuum truck to suck out a wet well or for portable pumps to be carried to the site to pump into the vacuum truck. The vacuum truck will then take the sewage to the nearest portion of the system not relying on a satellite pumping system.

Vacuum truck transport will only be required in the event all other emergency approaches (stationary power, portable power, portable pumps, etc.) fail. For high flow stations and/or in high flow conditions, it may be difficult for a single vacuum truck to keep up with station. In these cases additional help shall be called upon. Tanker and/or vacuum truck brigade shall be implemented.

TASK 35: Dispatch Personnel

Should one or more station generators fail to start upon **loss** of power, technicians capable of troubleshooting the system will be dispatched by the Duty Supervisor. While there is always at least one technician on call, multiple problems requiring electrical system troubleshooting may require outside assistance. The firm of **Sandel-Avery** is available to respond and are familiar with the District's systems and could provide assistance if necessary and available. If a personnel shortage still occurs, electricians from other Utility Districts should be called in to troubleshoot and assist.

TASK 36: Troubleshoot

A. Power Outage (generator):

- Check fuel supply and filter.
- Check Oil Level.
- Check temperature.
- Attempt to manually start.

- Observe Fuel Pressure.
- Check battery and jump start if necessary.

B. Station Malfunction:

- Circuit breakers (Technicians only)
- Pump operation and Control circuitry (Technicians only)
- Bubbler or Transducer reading properly.
- Relays energized (Technicians only).
- Protective circuit status.
- Terminals tight (Technicians only).

TASK 37: Corrective Action Here

Based on what causes are found as a result of troubleshooting, either a temporary or permanent repair may be attempted. The repair technique employed should not come with the risk of major damage to the facility. If this is the case, more serious problems may occur thereby resulting in greater spill amounts.

If the problem cannot be corrected to the extent of restoring automatic control, then the manual controls will have to be utilized.

TASK 38: Set Up Emergency Pump

Upon a failure to restore pumping capability at a Main Station, emergency pumps will have to be set up to bypass the pump station entirely and pump from the wet well into the force main.

The District's 6" Generac pump can be set up at Secline, National, and Carnelian Main Stations to draw from the wet well and discharge into the existing force main through a Kamlock fitting. Check valves in the station will prevent backflow through the station's pumps, however if the check valves fail to properly seat, the discharge valves may be closed. All portable pumps should be placed on jack stands to avoid unnecessary walking or vibration. As a minimum the wheels should be chocked to prevent movement. Pressure piping must be kept as short as possible. Upon initiation of pumping the pump shall be monitored constantly.

TASK 39: Mobilize Emergency Pump (s)

Main Station: Upon notification of a spill. The District's 6" discharge pump with suction and discharge hoses will be dispatched to the affected station and call-in additional pumps as needed.

Satellite: Upon notification of a spill, portable pumps and the Vacuum Truck and or hydraulic truck with pumps will be dispatched to the station.

TASK 40: Attempt to Restore Operation

A. Secline:

- Check wet well level
- Check breakers for trip and reset if necessary.
- Check line power (will sometimes clarify problem by determining supply power is the cause (i.e. single phasing))
- Reset motor thermal overloads.
- Check pump control circuitry
- Go to manual operation.

B. National and Carnelian Bay:

- Check wet well level.
- Check disconnect switch for trip, reset if necessary.
- Check circuit breakers in main circuit and starter circuit, reset if necessary.
- Check line power (will sometimes clarify problem by determining supply power is the cause (i.e. single phasing))
- Reset motor thermal overloads.
- Check pump control circuitry
- If motor fails to start, place H.O.A. switch on "MANUAL".
- Check Q cell high temp resets on Q cells in control room. Check Q cell water levels.

C. Dollar Hill:

- Check wet well level.
- Check pump running light for station. If they are dim or out, push resets.
- Check station circuit breakers for pump power.
- If pumps do not start, turn H.O.A. switch to "HAND".
- Check bubbler compressors, and CO2 level gauge on flowmatcher panel
- Check main disconnect switch and voltage meter to the right of the main breaker.
- Make visual check of circuit breakers for obvious damage

TASK 41: Determine Cause

In the case of failure(s), the cause shall be determined. Once the cause is known, the maintenance procedures shall be adjusted to eliminate or anticipate a reoccurrence, or a permanent fix/solution shall be implemented/installed. If a redundant system can lower the probability of future failures, a work order for such a system will be issued.

Intermittent component failures may be extremely hard to diagnose after the fact. It is extremely important that someone familiar with the equipment carefully and methodically determine the reason for the failure.

TASK 42: Check Operation

Upon restoring automatic control of the pumping system, several complete on/off cycles shall be observed (monitored). The station shall not be left unattended until there is reasonable assurance of continued successful operation or an alternate control system is successfully operating.

**Tab 3 – Spill Response Plan
June 2, 2023**

**Notification, Monitoring, Reporting And Recordkeeping
Requirements**

1. Statewide Sanitary Sewer Systems General Order

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- a. Attachment E1 – Notification, Monitoring, Reporting And
Recordkeeping Requirements**
- b. Attachment E2 – Summary Of Notification, Monitoring And
Reporting Requirements**

**ATTACHMENT E1 – NOTIFICATION, MONITORING, REPORTING AND
RECORDKEEPING REQUIREMENTS**

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ATTACHMENT E1– NOTIFICATION, MONITORING, REPORTING AND RECORDKEEPING REQUIREMENTS

The Notification Requirements (section 1), Spill-specific Monitoring Requirements (section 2), Reporting Requirements (section 3) and Recordkeeping Requirements (section 4) in this Attachment are pursuant to Water Code section 13267 and section 13383, and are an enforceable component of this General Order. For the purpose of this General Order, the term:

- Notification means the notifying of appropriate parties of a spill event or other activity.
- Spill-specific Monitoring means the gathering of information and data for a specific spill event to be reported or kept as records.
- Reporting means the reporting of information and data into the online California Integrated Water Quality System (CIWQS) Sanitary Sewer System Database.
- Recordkeeping means the maintaining of information and data in an official records storage system.

Failure to comply with the notification, monitoring, reporting and recordkeeping requirements in this General Order may subject the Enrollee to civil liabilities of up to \$10,000 a day per violation pursuant to Water Code section 13385; up to \$1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement.

Water Code section 13193 et seq. requires the Regional Water Quality Control Boards (Regional Water Boards) and the State Water Resources Control Board (State Water Board) to collect sanitary sewer spill information for each spill event and make this information available to the public. Sanitary sewer spill information for each spill event includes but is not limited to: Enrollee contact information for each spill event, spill cause, estimated spill volume and factors used for estimation, location, date, time, duration, amount discharged to waters of the State, response and corrective action(s) taken.

1. NOTIFICATION REQUIREMENTS

1.1. Notification of Spills of 1,000 Gallons or Greater to the California Office of Emergency Services

Per Water Code section 13271, for a spill that discharges in or on any waters of the State, or discharges or is deposited where it is, or probably will be, discharged in or on any waters of the State, the Enrollee shall notify the California Office of Emergency Services and obtain a California Office of Emergency Services Control Number as soon as possible **but no later than two (2) hours** after:

- The Enrollee has knowledge of the spill; and
- Notification can be provided without substantially impeding cleanup or other emergency measures.

The notification requirements in this section apply to individual spills of 1,000 gallons or greater, from an Enrollee-owned and/or operated laterals, to a water of the State.

1.2. Spill Notification Information

The Enrollee shall provide the following spill information to the California Office of Emergency Services before receiving a Control Number, as applicable:

- Name and phone number of the person notifying the California Office of Emergency Services;
- Estimated spill volume (gallons);
- Estimated spill rate from the system (gallons per minute);
- Estimated discharge rate (gallons per minute) directly into waters of the State or indirectly into a drainage conveyance system;
- Spill incident description:
 - Brief narrative of the spill event, and
 - Spill incident location (address, city, and zip code) and closest cross streets and/or landmarks;
- Name and phone number of contact person on-scene;
- Date and time the Enrollee was informed of the spill event;
- Name of sanitary sewer system causing the spill;
- Spill cause or suspected cause (if known);
- Amount of spill contained;
- Name of receiving water body receiving or potentially receiving discharge; and
- Description of water body impact and/ or potential impact to beneficial uses.

1.3. Notification of Spill Report Updates

Following the initial notification to the California Office of Emergency Services and until such time that the Enrollee certifies the spill report in the online CIWQS Sanitary Sewer System Database, the Enrollee shall provide updates to the California Office of Emergency Services regarding substantial changes to:

- Estimated spill volume (increase or decrease in gallons initially estimated);
- Estimated discharge volume discharged directly into waters of the State or indirectly into a drainage conveyance system (increase or decrease in gallons initially estimated); and
- Additional impact(s) to the receiving water(s) and beneficial uses.

2. SPILL-SPECIFIC MONITORING REQUIREMENTS

2.1 Spill Location and Spread

The Enrollee shall visually assess the spill location(s) and spread using photography, global positioning system (GPS), and other best available tools. The Enrollee shall document the critical spill locations, including:

- Photography and GPS coordinates for:
 - The system location where spill originated.
For multiple appearance points of a single spill event, the points closest to the spill origin.
- Photography for:
 - Drainage conveyance system entry locations,
 - The location(s) of discharge into surface waters, as applicable,
 - Extent of spill spread, and
 - The location(s) of clean up.

2.2 Spill Volume Estimation

To assess the approximate spill magnitude and spread, the Enrollee shall estimate the total spill volume using updated volume estimation techniques, calculations, and documentation for electronic reporting. The Enrollee shall update its notification and reporting of estimated spill volume (which includes spill volume recovered) as further information is gathered during and after a spill event.

2.3. Receiving Water Monitoring

2.3.1. Receiving Water Visual Observations

Through visual observations and use of best available spill volume-estimating techniques and field calculation techniques, the Enrollee shall gather and document the following information for spills discharging to surface waters:

- Estimated spill travel time to the receiving water;
- For spills entering a drainage conveyance system, estimated spill travel time from the point of entry into the drainage conveyance system to the point of discharge into the receiving water;
- Estimated spill volume entering the receiving water; and
- Photography of:
 - Waterbody bank erosion,
 - Floating matter,
 - Water surface sheen (potentially from oil and grease),

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- Discoloration of receiving water, and
- Impact to the receiving water.

2.3.2. Receiving Water – Water Quality Sampling and Analysis

For sewage spills in which an estimated 50,000 gallons or greater are discharged into a surface water, the Enrollee shall conduct the following water quality sampling no later than **18 hours** after the Enrollee's knowledge of a potential discharge to a surface water:

- Collect one water sample, each day of the duration of the spill, at:
 - The DCS-001 location as described in section 2.3.4 (Receiving Water Sampling Locations) of this Attachment, if sewage discharges to a surface water via a drainage conveyance system; and/or
 - Each of the three receiving water sampling locations in section 2.3.4 (Receiving Water Sampling Locations) of this Attachment;

If the receiving water has no flow during the duration of the spill, the Enrollee must report "No Sampling Due To No Flow" for its receiving water sampling locations.

The Enrollee shall analyze the collected receiving water samples for the following constituents per section 2.3.3 (Water Quality Analysis Specifications) of this Attachment:

- Ammonia, and
- Appropriate bacterial indicator(s) per the applicable Basin Plan water quality objectives, including one or more of the following, unless directed otherwise by the Regional Water Board:
 - Total Coliform Bacteria
 - Fecal Coliform Bacteria
 - *E-coli*
 - Enterococcus

Dependent on the receiving water(s), sampling of bacterial indicators shall be sufficient to determine post-spill (after the spill) compliance with the water quality objectives and bacterial standards of the California Ocean Plan or the California Inland Surface Water Enclosed Bays, and Estuaries Plan, including the frequency and/or number of post-spill receiving water samples as may be specified in the applicable plans.

The Enrollee shall collect and analyze additional samples as required by the applicable Regional Water Board Executive Officer or designee.

2.3.3. Water Quality Analysis Specifications

Spill monitoring must be representative of the monitored activity (40 Code of Federal Regulations section 122.41(j)(1)).

Sufficiently Sensitive Methods

Sample analysis must be conducted according to sufficiently sensitive test methods approved under 40 Code of Federal Regulations Part 136 for the sample analysis of pollutants. For the purposes of this General Order, a method is sufficiently sensitive when the minimum level of the analytical method approved under 40 Code of Federal Regulations Part 136 is at or below the receiving water pollutant criteria.

Environmental Laboratory Accreditation Program-Accredited Laboratories

The analysis of water quality samples required per this General Order must be performed by a laboratory that has accreditation pursuant to Article 3 (commencing with section 100825) of Chapter 4 of Part 1 of Division 101 of the Health and Safety Code. (Water Code section 13176(a).) The State Water Board accredits laboratories through its Environmental Laboratory Accreditation Program (ELAP).

2.3.4. Receiving Water Sampling Locations

The Enrollee shall collect receiving water samples at the following locations.

Sampling of Flow in Drainage Conveyance System (DCS) Prior to Discharge

Sampling Location	Sampling Location Description
DCS-001	A point in a drainage conveyance system before the drainage conveyance system flow discharges into a receiving water.

Receiving Surface Water Sampling (RSW)¹

Sampling Location	Sampling Location Description
RSW-001 Point of Discharge	A point in the receiving water where sewage initially enters the receiving water.
RSW-001U: Upstream of Point of Discharge	A point in the receiving water, upstream of the point of sewage discharge, to capture ambient conditions absent of sewage discharge impacts.

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Sampling Location	Sampling Location Description
RSW-001D: Downstream of Point of Discharge	A point in the receiving water, downstream of the point of sewage discharge, where the spill material is fully mixed with the receiving water.

¹ The Enrollee must use its best professional judgment to determine the upstream and downstream distances based on receiving water flow, accessibility to upstream/downstream waterbody banks, and size of visible sewage plume.

2.4. Safety and Access Exceptions

If the Enrollee encounters access restrictions or unsafe conditions that prevents its compliance with spill response requirements or monitoring requirements in this General Order, the Enrollee shall provide documentation of access restrictions and/or safety hazards in the corresponding required report.

3. REPORTING REQUIREMENTS

All reporting required in this General Order must be submitted electronically to the online CIWQS Sanitary Sewer System Database (<https://ciwqs.waterboards.ca.gov>), unless specified otherwise in this General Order. Electronic reporting may solely be conducted by a Legally Responsible Official or Data Submitter(s) previously designated by the Legally Responsible Official, as required in section 5.8 (Designation of Data Submitters) of this General Order.

The Enrollee shall report any information that is protected by the Homeland Security Act, by email to SanitarySewer@waterboards.ca.gov, with a brief explanation of the protection provided by the Homeland Security Act for the subject report to be protected from unauthorized disclosure and/or public access, and for official Water Board regulatory purposes only.

3.1. Reporting Requirements for Individual Category 1 Spill Reporting

3.1.1. Draft Spill Report for Category 1 Spills

Within three (3) business days of the Enrollee’s knowledge of a Category 1 spill, the Enrollee shall submit a Draft Spill Report to the online CIWQS Sanitary Sewer System Database.

The Draft Spill Report must, at minimum, include the following items:

1. Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;
2. Spill location name;
3. Date and time the Enrollee was notified of, or self-discovered, the spill;
4. Operator arrival time;

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5. Estimated spill start date and time;
6. Date and time the Enrollee notified the California Office of Emergency Services, and the assigned control number;
7. Description, photographs, and GPS coordinates of the system location where the spill originated;
 - o If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
8. Estimated total spill volume exiting the system;
9. Description and photographs of the extent of the spill and spill boundaries;
10. Did the spill reach a drainage conveyance system? If Yes:
 - o Description of the drainage conveyance system transporting the spill;
 - o Photographs of the drainage conveyance system entry location(s);
 - o Estimated spill volume fully recovered from the drainage conveyance system;
 - o Estimated spill volume remaining within the drainage conveyance system;
11. Description and photographs of all discharge point(s) into the surface water;
12. Estimated spill volume that discharged to surface waters; and
13. Estimated total spill volume recovered.

3.1.2. Certified Spill Report for Category 1 Spills

Within 15 calendar days of the spill end date, the Enrollee shall submit a Certified Spill Report for Category 1 spills, to the online CIWQS Sanitary Sewer System Database. Upon completion of the Certified Spill Report, the online CIWQS Sanitary Sewer System Database will issue a final spill event identification number.

The Certified Spill Report must, at minimum, include the following mandatory information in addition to all information in the Draft Spill Report per section 3.1.1 (Draft Spill Report for Category 1 Spills) above:

1. Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill;
2. Spill end date and time;
3. Description of how the spill volume estimations were calculated, including at a minimum:
 - o The methodology, assumptions and type of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
 - o The methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time;

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4. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
5. System failure location (for example, main, lateral, pump station, etc.);
6. Description of the pipe material, and estimated age of the pipe material, at the failure location;
7. Description of the impact of the spill;
8. Whether or not the spill was associated with a storm event;
9. Description of spill response activities including description of immediate spill containment and cleanup efforts;
10. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps;
11. Spill response completion date;
12. Detailed narrative of investigation and investigation findings of cause of spill;
13. Reasons for an ongoing investigation (as applicable) and the expected date of completion;
14. Name and type of receiving water body(s);
15. Description of the water body(s), including but not limited to:
 - o Observed impacts on aquatic life,
 - o Public closure, restricted public access, temporary restricted use, and/or posted health warnings due to spill,
 - o Responsible entity for closing/restricting use of water body, and
 - o Number of days closed/restricted as a result of the spill.
16. Whether or not the spill was located within 1,000 feet of a municipal surface water intake; and
17. If water quality samples were collected, identify sample locations and the parameters the water quality samples were analyzed for. If no samples were taken, Not Applicable shall be selected.

3.1.3. Spill Technical Report for Individual Category 1 Spill in which 50,000 Gallons or Greater Discharged into a Surface Water

For any spill in which 50,000 gallons or greater discharged into a surface water, **within 45 calendar days** of the spill end date, the Enrollee shall submit a Spill Technical Report to the online CIWQS Sanitary Sewer System Database. The Spill Technical Report, at minimum, must include the following information:

1. Spill causes and circumstances, including at minimum:
 - o Complete and detailed explanation of how and when the spill was discovered;

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- Photographs illustrating the spill origin, the extent and reach of the spill, drainage conveyance system entrance and exit, receiving water, and post-cleanup site conditions;
 - Diagram showing the spill failure point, appearance point(s), the spill flow path, and ultimate destinations;
 - Detailed description of the methodology employed, and available data used to calculate the discharge volume and, if applicable, the recovered spill volume;
 - Detailed description of the spill cause(s);
 - Description of the pipe material, and estimated age of the pipe material, at the failure location;
 - Description of the impact of the spill;
 - Copy of original field crew records used to document the spill; and
 - Historical maintenance records for the failure location.
2. Enrollee's response to the spill:
- Chronological narrative description of all actions taken by the Enrollee to terminate the spill;
 - Explanation of how the Sewer System Management Plan Spill Emergency Response Plan was implemented to respond to and mitigate the spill; and
 - Final corrective action(s) completed and a schedule for planned corrective actions, including:
 - Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable,
 - Identifiable system modifications, and operation and maintenance program modifications needed to prevent repeated spill occurrences, and
 - Necessary modifications to the Emergency Spill Response Plan to incorporate lessons learned in responding to and mitigating the spill.
3. Water Quality Monitoring, including at minimum:
- Description of all water quality sampling activities conducted;
 - List of pollutant and parameters monitored, sampled and analyzed; as required in section 2.3 (Receiving Water Monitoring) of this Attachment;
 - Laboratory results, including laboratory reports;
 - Detailed location map illustrating all water quality sampling points; and
 - Other regulatory agencies receiving sample results (if applicable).
4. Evaluation of spill impact(s), including a description of short-term and long-term impact(s) to beneficial uses of the surface water.

3.1.4. Amended Certified Spill Reports for Individual Category 1 Spills

The Enrollee shall update or add additional information to a Certified Spill Report within **90 calendar days** of the spill end date by amending the report or by adding an attachment to the Spill Report in the online CIWQS Sanitary Sewer System Database. The Enrollee shall certify the amended report.

After **90 calendar days**, the Enrollee shall contact the State Water Board at SanitarySewer@waterboards.ca.gov to request to amend a Spill Report. The Legally Responsible Official shall submit justification for why the additional information was not reported within the Amended Spill Report due date.

3.2. Reporting Requirements for Individual Category 2 Spill Reporting

3.2.1. Draft Spill Report for Category 2 Spills

Within three (3) business days of the Enrollee's knowledge of a Category 2 spill, the Enrollee shall submit a Draft Spill Report to the online CIWQS Sanitary Sewer System Database.

The Draft Spill Report must, at minimum, include the following items:

1. Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;
2. Spill location name;
3. Date and time the Enrollee was notified of, or self-discovered, the spill;
4. Operator arrival time;
5. Estimated spill start date and time;
6. Date and time the Enrollee notified the California Office of Emergency Services, and the assigned control number;
7. Description, photographs, and GPS coordinates of the system location where the spill originated;
If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
8. Estimated total spill volume exiting the system;
9. Description and photographs of the extent of the spill and spill boundaries;
10. Did the spill reach a drainage conveyance system? If Yes:
 - o Description of the drainage conveyance system transporting the spill;
 - o Photographs of the drainage conveyance system entry location(s);
 - o Estimated spill volume fully recovered from the drainage conveyance system;
 - o Estimated spill volume remaining within the drainage conveyance system;

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- Estimated spill volume discharged to a groundwater infiltration basin or facility, if applicable; and

11. Estimated total spill volume recovered.

3.2.2. Certified Spill Report for Category 2 Spills

Within 15 calendar days of the spill end date, the Enrollee shall submit a Certified Spill Report for the Category 2 spill, to the online CIWQS Sanitary Sewer System Database (<https://ciwqs.waterboards.ca.gov>). Upon completion of the Certified Spill Report, the online CIWQS Sanitary Sewer System Database will issue a final spill event identification number.

The Certified Spill Report must, at minimum, include the following mandatory information in addition to all information in the Draft Spill Report per section 3.2.1 (Draft Spill Report for Category 2 Spills) above:

1. Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill;
2. Spill end date and time;
3. Description of how the spill volume estimations were calculated, including at a minimum:
 - The methodology, assumptions and type of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
 - The methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time;
4. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
5. System failure location (for example, main, pump station, etc.);
6. Description of the pipe/infrastructure material, and estimated age of the pipe material, at the failure location;
7. Description of the impact of the spill;
8. Whether or not the spill was associated with a storm event;
9. Description of spill response activities including description of immediate spill containment and cleanup efforts;
10. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps;
11. Spill response completion date;
12. Detailed narrative of investigation and investigation findings of cause of spill;
13. Reasons for an ongoing investigation (as applicable) and the expected date of completion; and

14. Whether or not the spill was located within 1,000 feet of a municipal surface water intake.

3.2.3. Amended Certified Spill Reports for Individual Category 2 Spills

The Enrollee shall update or add additional information to a Certified Spill Report within **90 calendar days** of the spill end date by amending the report or by adding an attachment to the Spill Report in the online CIWQS Sanitary Sewer System Database. The Enrollee shall certify the amended report.

After **90 calendar days**, the Enrollee shall contact the State Water Board at SanitarySewer@waterboards.ca.gov to request to amend a Spill Report. The Legally Responsible Official shall submit justification for why the additional information was not reported within the Amended Spill Report due date.

3.3. Monthly Certified Spill Reporting for Category 3 Spills

The Enrollee shall report and certify all Category 3 spills to the online CIWQS Sanitary Sewer System Database within 30 calendar days after the end of the month in which the spills occurred. (For example, all Category 3 spills occurring in the month of February shall be reported and certified by March 30th). After the Legally Responsible Official certifies the spills, the online CIWQS Sanitary Sewer System Database will issue a spill event identification number for each spill.

The monthly reporting of all Category 3 spills must include the following items for each spill:

1. Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;
2. Spill location name;
3. Date and time the Enrollee was notified of, or self-discovered, the spill;
4. Operator arrival time;
5. Estimated spill start date and time;
6. Description, photographs, and GPS coordinates where the spill originated:
 - o If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
7. Estimated total spill volume exiting the system;
8. Description and photographs of the extent of the spill and spill boundaries;
9. Did the spill reach a drainage conveyance system? If Yes:
 - o Description of the drainage conveyance system transporting the spill;
 - o Photographs of the drainage conveyance system entry location(s);
 - o Estimated spill volume fully recovered from the drainage conveyance system; and

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- Estimated spill volume discharged to a groundwater infiltration basis or facility, if applicable.
- 10. Estimated total spill volume recovered;
- 11. Description of the spill event destination(s), including GPS coordinates, if available, that represent the full spread and reaches of the spill;
- 12. Spill end date and time;
- 13. Description of how the spill volume estimations were calculated, including, at minimum:
 - The methodology and type of data relied upon, including supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
 - The methodology and type of data relied upon to estimate the spill start time, on-going spill rate at time of arrival (if applicable), and the spill end time;
- 14. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
- 15. System failure location (for example, main, pump station, etc.);
- 16. Description of the pipe/infrastructure material, and estimated age of the pipe/infrastructure material, at the failure location;
- 17. Description of the impact of the spill;
- 18. Whether or not the spill was associated with a storm event;
- 19. Description of spill response activities including description of immediate spill containment and cleanup efforts;
- 20. Description of spill corrective actions, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of the major milestones for those steps; including, at minimum:
 - Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable, and
 - Identifiable system modifications, and operation and maintenance program modifications needed to prevent repeated spill occurrences at the same spill event location, including:
 - Adjusted schedule/method of preventive maintenance,
 - Planned rehabilitation or replacement of sanitary sewer asset,
 - Inspected, repaired asset(s), or replaced defective asset(s),
 - Capital improvements,
 - Documentation verifying immediately implemented system modifications and operating/maintenance modifications,
 - Description of spill response activities,

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- Spill response completion date, and
- Ongoing investigation efforts, and expected completion date of investigation to determine the full cause of spill;

21. Detailed narrative of investigation and investigation findings of cause of spill.

3.4. Monthly Certified Spill Reporting for Category 4 Spills

The Enrollee shall report and certify the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills to the online CIWQS Sanitary Sewer System Database, within 30 calendar days after the end of the month in which the spills occurred.

3.5. Amended Certified Spill Reports for Category 3 Spills

Within 90 calendar days of the certified Spill Report due date, the Enrollee may update or add additional information to a certified Spill Report by amending the report or by adding an attachment to the Spill Report in the online CIWQS Sanitary Sewer System Database. The Enrollee shall certify the amended report.

After 90 calendar days, the Legally Responsible Official shall contact the State Water Board at SanitarySewer@waterboards.ca.gov to request to amend a certified Spill Report. The Legally Responsible Official shall submit justification for why the additional information was not reported within the 90-day timeframe for amending the certified Spill Report, as provided above.

3.6. Annual Certified Spill Reporting of Category 4 and/or Lateral Spills

For all Category 4 spills and spills from its owned and/or operated laterals that are caused by a failure or blockage in the lateral and that do not discharge to a surface water, the Enrollee shall:

- Maintain records per section 4.4. of this Attachment;

The Enrollee shall provide records upon request by State Water Board or Regional Water Board staff.

- Annually upload and certify a report, in an appropriate digital format, of all recordkeeping of spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occurred.

A spill from an Enrollee-owned and/or operated lateral that discharges to a surface water is a Category 1 spill; the Enrollee shall report all Category 1 spills per section 3.1 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

3.7. Monthly Certification of “No-Spills” or “Category 4 Spills” and/or “Non-Category 1 Lateral Spills”

If either (1) no spills occur during a calendar month or (2) only Category 4, and/or Enrollee-owned and/or operated lateral spills (that do not discharge to a surface water) occur during a calendar month, the Enrollee shall certify, within 30 calendar days after

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the end of each calendar month, either a “No-Spill” certification statement, or a “Category 4 Spills” and/or “Non-Category 1 Lateral Spills” certification statement, in the online CIWQS Sanitary Sewer System Database, certifying that there were either no spills, or Category 4 and/or Non-Category 1 Lateral Spills that will be reported annually (per section 3.6 of this Attachment) for the designated month.

If a spill starts in one calendar month and ends in a subsequent calendar month, and the Enrollee has no further spills of any category, in the subsequent calendar month, the Enrollee shall certify “no-spills” for the subsequent calendar month.

If the Enrollee has no spills from its systems during a calendar month, but the Enrollee voluntarily reported a spill from a private lateral or a private system, the Enrollee shall certify “no-spills” for that calendar month.

If the Enrollee has spills from its owned and/or operated laterals during a calendar month, the Enrollee shall not certify “no spills” for that calendar month.

3.8. Electronic Sanitary Sewer System Service Area Boundary Map

The Legally Responsible Official shall submit, to the State Water Board, an up-to-date electronic spatial map of its sewer system service area boundaries. The map must be in accordance with section 5.14 (Electronic Sanitary Sewer System Service Area Boundary Map) of this General Order and the specification provided on the statewide Sanitary Sewer Systems program website. The map must include the location of wastewater treatment facility(ies) that treats the sewer system waste, if in the same sewer service boundary.

By the Effective Date of this General Order, specifications for the electronic sanitary sewer service area boundary map format will be provided on the statewide Sanitary Sewer Systems Order program website.

3.9. Annual Report (Previously termed as Collection System Questionnaire in General Order 2006-0003-DWQ)

A new Enrollee shall complete and submit its first certified Annual Report into the online CIWQS Sanitary Sewer System Database, **within 30 days of obtaining a CIWQS account**; Subsequent Annual Reports are due by April 1 of each year.

All enrollees shall update their previous year’s Annual Report, **by April 1 of each year after the Effective Date of this General Order**, for each calendar year (January 1 through December 31).

The Annual Report must be entered directly into the online CIWQS Sanitary Sewer System Database. The Enrollee’s Legally Responsible Official shall certify the Annual Report as instructed in CIWQS;

The Annual Report must address, and update as applicable, the following items:

- Population served;

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- Updated sewer system service area boundary map, if service area boundary has changed from original map submitted per section 5.14 (Electronic Sanitary Sewer System Service Area Boundary Map) of this General Order;
- Number of system operation and maintenance staff:
 - Entry level (less than two years of experience),
 - Journey level (greater than two years of experience),
 - Supervisory level, and
 - Managerial level;
- Number of operation and maintenance staff certified as a certified collection system operator by the California Water Environmental Association (CWEA), with:
 - Corresponding number of certified collection system operator grade levels (Grade I, II, III, IV, and V);
- System information:
 - Miles of system gravity and force mains,
 - Number of upper and lower service laterals connected to system,
 - Estimated number of upper and lower laterals owned and/or operated by the Enrollee,
 - Portion of laterals that is Enrollee's responsibility,
 - Average age the major components of system infrastructure,
 - Number and age of pump stations, and
 - Estimated total miles of the system pipeline not accessible for maintenance;
- Name and location of the treatment plant(s) receiving sanitary sewer system's waste;
- Name of satellite sewer system tributaries;
- Number of system's gravity sewer above or underground crossings of water bodies throughout system;
- Number of force main (pressurized pipe) above or underground crossings of water bodies throughout system;
- Number of siphons used to convey waste throughout the sewer system;
- Miles of sewer system cleaned;
- Miles of sewer system video inspected, or comparable (i.e., video closed-circuit television or alternative inspection methods);
- System Performance Evaluation as specified in section 5.11 (System Performance Analysis) of this General Order;
- Major spill causes (for example, root intrusion, grease deposition);

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- System infrastructure failure points (for example, main, pump station, lateral, etc.);
- Ongoing spill investigations; and
- Actions taken to address system deficiencies.

3.10. Sewer System Management Plan Audit Reporting Requirements

The Enrollee shall submit its Sewer System Management Plan Audit and other pertinent audit information, in accordance with section 5.4 (Sewer System Management Plan Audits) of this General Order, to the online CIWQS Sanitary Sewer System Database **by six (6) months after the end of the 3-year audit period.**

If a Sewer System Management Plan Audit is not conducted as required: the Enrollee shall:

- Update the online CIWQS Sanitary Sewer System Database and select the justification for not conducting the Audit; and
- Notify its corresponding Regional Water Board (see Attachment F (Regional Water Quality Control Board Contact Information)) of the justification for the lapsed requirements.

The Enrollee's reporting of a justification for not conducting a timely Audit does not justify non-compliance with this General Order. The Enrollee shall:

- Submit the late Audit as required in this General Order; and
- Comply with subsequent Audit requirements and due dates corresponding with the original audit cycle.

3.11. Sewer System Management Plan Reporting Requirements

For an Existing Enrollee previously regulated by Order 2006-0003-DWQ: **Within every six (6) years after the required due date of its last Plan Update,** the Legally Responsible Official shall upload and certify a local governing entity-approved Sewer System Management Plan Update to the online CIWQS Sanitary Sewer System Database. If the electronic document format or size capacity prevents the electronic upload of the Plan, the Legally Responsible Official shall report an electronic link to its updated Sewer System Management Plan posted on its own website.

Order 2006-0003-DWQ required each enrollee to develop its initial Sewer System Management Plan per the following schedule, with required Plan updates at a frequency of 5-years thereafter:

Systems serving populations: Greater than 100,000: May 2, 2009

Between 100,000 and 10,000: August 2, 2009

Between 10,000 and 2,500: May 2, 2010

Less than 2,500: August 2, 2010

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This Order carries forth the previously-required Plan Update schedule per Order 2006-0003-DWQ. Per the six-year Plan Update frequency required in this Order, the Enrollee shall upload and certify its first Plan Update, to the online CIWQS Sanitary Sewer System Database by the following due dates, with subsequent Plan Updates at the frequency of six years thereafter:

Systems serving populations: Greater than 100,000: May 2, 2025

Between 100,000 and 10,000: August 2, 2025

Between 10,000 and 2,500: May 2, 2026

Less than 2,500: August 2, 2026

For a New Enrollee: Within twelve (12) months of its Application for Enrollment Approval date, the Legally Responsible Official of a new Enrollee shall upload and certify a local governing entity-approved Sewer System Management Plan to the online CIWQS Sanitary Sewer System Database. If electronic document format or size capacity prevents the electronic upload of the Plan, the Legally Responsible Official shall report an electronic link to its Sewer System Management Plan posted on its own website. The due date for subsequent 6-year Plan updates, is six (6) years from the submittal due date of the new Enrollee's first Sewer System Management Plan.

4. RECORDKEEPING REQUIREMENTS

The Enrollee shall maintain records to document compliance with the provisions of this General Order, and previous General Order 2006-0003-DWQ as applicable, for each sanitary sewer system owned, including any required records generated by an Enrollee's contractor(s).

4.1. Recordkeeping Time Period

The Enrollee shall maintain records of documents required in this Attachment, including records collected for compliance with this General Order, and records collected in accordance with previous General Order 2006-0003-DWQ, for five (5) years.

4.2. Availability of Documents

The Enrollee shall make the records required in this General Order readily available, either electronic or hard copies, for review by Water Board staff during onsite inspections or through an information request.

4.3. Spill Reports

The Enrollee shall maintain records for each of the following spill-related events and activities:

- Spill event complaint, including but not limited to records documenting how the Enrollee responded to notifications of spills. Each complaint record must, at a minimum, include the following information:
 - Date, time, and method of notification,

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- Date and time the complainant first noticed the spill, if available,
- Narrative description of the complaint, including any information the caller provided regarding whether the spill has reached surface waters or a drainage conveyance system, if available,
- Complainant's contact information, if available, and
- Final resolution of the complaint;
- Records documenting the steps and/or remedial action(s) undertaken by the Enrollee, using all available information, to comply with this General Order, and previous General Order 2006-0003-DWQ as applicable;
- Records documenting how estimate(s) of volume(s) and, if applicable, volume(s) of spill recovered were calculated;
- All California Office of Emergency Services notification records, as applicable; and
- Records, in accordance with the Monitoring Requirements in this Attachment.

4.4. Recordkeeping of Category 4 Spills and Non-Category 1 Lateral Spills

An Enrollee must maintain the following records for each individual Category 4 spill and for each individual non-Category 1 Enrollee-owned and/or operated lateral spill, and report in accordance to section 3.6 (Annual Certified Spill Reporting of Category 4 and/or Lateral Spills) of this Attachment.

Recordkeeping of Individual Category 4 Spill Information:

1. Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;
2. Spill location name;
3. Description and GPS coordinates for the system location where the spill originated;
4. Did the spill reach a drainage conveyance system? If Yes:
 - Description of drainage conveyance system location,
 - Estimated spill volume fully recovered within the drainage conveyance system, and
 - Estimated spill volume remaining within the drainage conveyance system;
5. Estimated total spill volume exiting the sanitary sewer system;
6. Spill date and start time;
7. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
8. System failure location (for example, main, pump station, etc.);
9. Description of spill response activities including description of immediate spill containment and cleanup efforts;
10. Description of how the volume estimation was calculated, including, at minimum:

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- The methodology and type of data relied upon, including supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
 - The methodology and type of data relied upon to estimate the spill start time, on-going spill rate at time of arrival (if applicable), and the spill end time;
11. Description of implemented system modifications and operating/maintenance modifications.

Recordkeeping of Individual Lateral Spill Information:

1. Date and time the Enrollee was notified of, or self-discovered, the spill;
2. Location of individual spill;
3. Estimated individual spill volume;
4. Spill cause(s) (for example, root intrusion, grease deposition, etc.); and
5. Description of how the volume estimations were calculated.

Total Annual Spill Information:

1. Estimated total annual spill volume;
2. Description of spill corrective actions, including at minimum:
 - Local regulatory enforcement action taken against the sewer lateral owner in response to a spill, as applicable, and
 - System operation, maintenance and program modifications implemented to prevent repeated spill occurrences at the same spill location.

4.5. Sewer System Telemetry Records

The Enrollee shall maintain the following sewer system telemetry records if used to document compliance with this General Order, and previous General Order 2006-0003-DWQ as applicable, including spill volume estimates:

- Supervisory control and data acquisition (SCADA) system(s);
- Alarm system(s);
- Flow monitoring device(s) or other instrument(s) used to estimate sewage flow rates, and/or volumes;
- Computerized maintenance management system records; and
- Asset management-related records.

4.6. Sewer System Management Plan Implementation Records

The Enrollee shall maintain records documenting the Enrollee's implementation of its Sewer System Management Plan, including documents supporting its Sewer System Management Plan audits, corrections, modifications, and updates to the Sewer System Management Plan.

4.7. Audit Records

The Enrollee shall maintain, at minimum, the following records pertaining to its Sewer System Management Plan audits, and other internal audits:

- Completed audit documents and findings;
- Name and contact information of staff and/or consultants that conducted or involved in the audit; and
- Follow-up actions based on audit findings.

4.8. Equipment Records

The Enrollee shall maintain a log of all owned and leased sewer system cleaning, operational, maintenance, construction, and rehabilitation equipment.

4.9. Work Orders

The Enrollee shall maintain record of work orders for operations and maintenance projects.

ATTACHMENT E2 – SUMMARY OF NOTIFICATION, MONITORING AND REPORTING REQUIREMENTS

This Attachment provides a summary of notification, monitoring and reporting requirements, by spill category, and for Enrollee-owned and/or operated laterals as required in Attachment E1 of this General Order, for quick reference purposes only.

Table E2-1

Spill Category 1: Spills to Surface Waters

Spill Requirement	Due	Method
Notification	<p>Within two (2) hours of the Enrollee’s knowledge of a Category 1 spill of 1,000 gallons or greater, discharging or threatening to discharge to surface waters:</p> <p>Notify the California Office of Emergency Services and obtain a notification control number.</p>	<p>California Office of Emergency Services at: (800) 852-7550 (Section 1 of Attachment E1)</p>
Monitoring	<ul style="list-style-type: none"> • Conduct spill-specific monitoring; • Conduct water quality sampling of the receiving water within 18 hours of initial knowledge of spill of 50,000 gallons or greater to surface waters. 	<p>(Section 2 of Attachment E1)</p>
Reporting	<ul style="list-style-type: none"> • Submit Draft Spill Report within three (3) business days of the Enrollee’s knowledge of the spill; • Submit Certified Spill Report within 15 calendar days of the spill end date; • Submit Technical Report within 45 calendar days after the spill end date for a Category 1 spill in which 50,000 gallons or greater discharged to surface waters; and • Submit Amended Spill Report within 90 calendar days after the spill end date. 	<p>(Section 3.1 of Attachment E1)</p>

Table E2-2

Spill Category 2: Spills of 1,000 Gallons or Greater That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	<p>Within two (2) hours of the Enrollee's knowledge of a Category 2 spill of 1,000 gallons or greater, discharging or threatening to discharge to waters of the State:</p> <p>Notify California Office of Emergency Services and obtain a notification control number.</p>	<p>California Office of Emergency Services at: (800) 852-7550</p> <p>(Section 1 of Attachment E1)</p>
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> • Submit Draft Spill Report within three (3) business days of the Enrollee's knowledge of the spill; • Submit Certified Spill Report within 15 calendar days of the spill end date; and • Submit Amended Spill Report within 90 calendar days after the spill end date. 	(Section 3.2 of Attachment E1)

Table E2-3

Spill Category 3: Spills of Equal or Greater than 50 Gallons and Less than 1,000 Gallons That Does Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	Not Applicable	Not Applicable
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> Submit monthly Certified Spill Report to the online CIWQS Sanitary Sewer System Database within 30 calendar days after the end of the month in which the spills occur; and Submit Amended Spill Reports within 90 calendar days after the Certified Spill Report due date. 	(Section 3.3 and 3.5 of Attachment E1)

Table E2-4

Spill Category 4: Spills Less Than 50 Gallons That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	Not Applicable	Not Applicable
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> If, during any calendar month, Category 4 spills occur, certify monthly, the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills into the online CIWQS Sanitary Sewer System Database, within 30 days after the end of the calendar month in which the spills occurred. Upload and certify a report, in an acceptable digital format, of all Category 4 spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur. 	(Section 3.4, 3.6, 3.7 and 4.4 of Attachment E1)

Table E2-5

Enrollee Owned and/or Operated Lateral Spills That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	<p>Within two (2) hours of the Enrollee’s knowledge of a spill of 1,000 gallons or greater, from an enrollee-owned and/or operated lateral, discharging or threatening to discharge to waters of the State:</p> <p>Notify California Office of Emergency Services and obtain a notification control number.</p> <p>Not applicable to a spill of less than 1,000 gallons.</p>	<p>California Office of Emergency Services at: (800) 852-7550</p> <p>(Section 1 of Attachment E1)</p>
Monitoring	<p>Conduct visual monitoring.</p>	<p>(Section 2 of Attachment E1)</p>
Reporting	<ul style="list-style-type: none"> • Upload and certify a report, in an acceptable digital format, of all lateral spills (that do not discharge to a surface water) to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur. • Report a lateral spill of any volume that discharges to a surface water as a Category 1 spill. 	<p>(Sections 3.6, 3.7 and 4.4 of Attachment E1)</p>

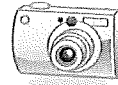
**Tab 4 – Spill Response Plan
June 2, 2023**

Forms and Documents

1. SSO Response – Field Checklist & Documentation – Field Crew
2. SSO Response – Field Checklist & Documentation – Duty Supervisor
3. Post SSO Briefings, Findings & Review – Duty Supervisor
4. Agreement for Emergency Repairs on Private Property

SSO Response - Field Checklist & Documentation - Field Crew

Initial Reporting & Response



Reporting Party (Callers Name & Phone #): _____
Call Received (Date/Time): _____ Received by (District Personnel): _____
District On-Site Arrival (Date/Time): _____ Responding District Employee(s): _____



Spill Discovery, Time Notes, Information & Response

(Best Available Information based on Site interviews, District Investigations, Etc. - note: document all attempts)

SSO Discovery (by NTPUD) (If Different than Arrival Time) (Date/Time): _____

Time SSO Began (Date/Time/comments): _____

Is Sewer Currently Spilling: (YES / NO)

Spill Address/Location: _____

Spill Appearance Point: Building-C/O P/L C/O MH Gravity Sewer Force main Lift Station

Other and/or Comments: _____

Final Spill Destination: Beach Building Hillside adjacent to hwy Street/curb/gutter

Storm/DI Surface water Unpaved surface Other paved surface

Other and/or Comments: _____

Cause of SSO Identified at (Date/Time): _____

Failed at: Mainline Lower lateral Upper lateral Force main Lift station

Other and/or Comments: _____

Spill Cause: Roots Grease Debris Vandalism Capacity Design Mechanical failure

Other and/or Comments: _____

SSO Volume (see 2nd sheet of this form for more detail on Spill Volume and/or Flow Rate) (gallons): _____

SSO Category (see Response Procedures (tab 2), and/or Notification Flowchart (tab 3) for Cat. determination): 1 2 3

Duty Supervisor Notified (ASAP for all Cat. 1 & 2) (max. next day for Cat 3.) (Date/Time): _____

SSO End Time (Date/Time): _____

Cause of SSO Eliminated at (Date/Time): _____

Description of Response Measures Taken and SSO Comments: _____

Containment, Clean up & Response:

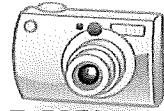
Volume of Spill Recovered (Do Not Count Wash Down Water): _____

Containment and/or Clean Up Began (Date/Time): _____

Clean up & Response Ended/Completed (Date/Time): _____

Description of Containment & Clean up Measures Taken and Comments (as applicable): _____

Spill & Flow Rate (If Active Spill):



• **REFERENCE PICTURES, TABLES, AND CHARTS:**

*SEE TAB 5 (EMERGENCY RESPONSE BINDER) FOR FLOW ESTIMATION PICTURES & TABLES

Flow Rate (gal / min) = _____

• **CALCULATION:**

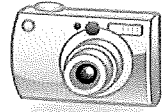
1 - Cross Sectional Area of Flow (avg. depth x avg. width) (sq. ft.) = _____

2 - Speed of Flow (use improvised float and measure time of travel) (ft./sec.) = _____

CALCULATION = 1 x 2 x 7.48 x 60 = (gal./min.) = _____

Spill Volume (If Not Active Spill):

(USE MOST APPLICABLE METHOD -OR- ALL AS APPLICABLE)



• **EYEBALL ESTIMATE** (Imagine a Known Volume Amount Tipped Over)

(1 Gallon Jug - 5 Gallon Bucket - 32 Gallon Trash Can - 55 Gallon Drum)

VOLUME = (Known amount) x (how many) = (gal) = _____

• **MEASURED VOLUME ESTIMATE** (Field Measurements)

[Draw Sketch of Spill Area Below]

1 - Area (Divide Wetted Areas Up and Add Together *if Necessary*) (sq. ft.) = _____

2 - Apply % Wet or % Soil Moisture Content *if Necessary* (%) = _____

3 - Average Depth (inches) = _____

CALCULATION = 1 x 2 x 3 x 7.48 ÷ 12 = (gal) = _____

Sketch and/or Diagrams of SSO Area(s):

SSO Personnel:

Responding Party (NTPUD): _____

Duty Supervisor (NTPUD): _____

Additional Support (NTPUD): _____

Other: _____

Post-SSO Briefings, Findings & Review - Duty Supervisor

SSO Spill Location Name: _____

SSO Date: _____ SSO Event ID (CIWQS): _____

Spill Appearance Point: Building Cleanout Manhole Force main Gravity Sewer Pump station
(circle applicable) Other: _____

Final Spill Destination: Beach Building Hillside adjacent to highway Street/curb & gutter
(circle applicable) Surface water Unpaved surface Other paved surface
Other: _____

Estimated Spill Volume (reported in CIWQS): _____

Cause of Spill (recap of information):

Failed at: Mainline Lower lateral Upper lateral Force main Lift station
(circle applicable) Other: _____

Spill Cause: Roots Grease Debris Vandalism Capacity Design Mechanical failure
(circle applicable) Other: _____

Final Cause Determination:

Follow-up or Corrective Action Taken:

Briefings & Discussions with District Personnel

Operations Crew Meeting Date (crew meeting held each morning): _____

Staff Member Leading Discussion: _____

Summary/Conclusion from Meeting: _____

Technicians Crew Meeting Date (eng. & tech meetings each Wednesday afternoon): _____

Staff Member Leading Discussion: _____

Summary/Conclusion from Meeting: _____

Management Team Meeting Date (management meeting each Tuesday morning): _____

Staff Member Leading Discussion: _____

Summary/Conclusion from Meeting: _____

Sanitary Sewer Management Plan (SSMP) Monitoring & Review

Affected and/or Applicable SSMP Section(s) and/or Element(s): _____

Is SSMP effective in addressing, preventing and/or minimizing this type of SSO (YES / NO)

Does SSMP require review/modification(s) to eliminate/reduce this type of SSO from occurring again (YES / NO)

If YES, which section(s) and/or element(s): _____

Schedule and/or Date for SSMP review/modification: _____

* Attach additional sheets/pages or write on back if additional explanation and/or information is necessary

AGREEMENT FOR NORTH TAHOE PUBLIC UTILITY DISTRICT TO PERFORM
EMERGENCY WASTEWATER REPAIRS ON PRIVATE PROPERTY

This Agreement is made on those dates set forth below by and between _____, herein called "Owner," and the North Tahoe Public Utility District, herein called "NTPUD."

WHEREAS, Property owner is the owner of certain real property, herein called the "Property," located at _____, within the sewer service area of the NTPUD; and

WHEREAS, the Property is served by the NTPUD sanitary sewer collection system; and

WHEREAS, the duly adopted rules, regulations and ordinances of the NTPUD require that the Owner maintain the service lateral between the NTPUD main sewer line and improvements located on the Property in a serviceable condition in order to prevent discharge of sewage outside of the sewer collection system and to prevent foreign materials from entering the NTPUD sewer collection system and damaging said system; and

WHEREAS, the Owner has experienced an emergency line leak or break on the service lateral serving the Property which threatens the integrity of the NTPUD sewer system, which emergency is continuing; and

WHEREAS, the Owner is unable to remedy said emergency in a timely fashion, has requested NTPUD emergency assistance and has agreed to pay NTPUD costs for rendering said emergency assistance; and

WHEREAS, while the NTPUD normally does not render assistance on private property, because of the unusual circumstances herein, the NTPUD is prepared to render said emergency assistance under the terms and conditions set forth in this Agreement.

NOW, THEREFORE, it is hereby agreed by and between the Owner and the NTPUD as follows:

1. AUTHORIZATION AND REQUEST BY OWNER

Owner hereby authorizes and requests the NTPUD to enter onto the Property to perform the following work:

Owner represents that it has the legal right to grant such access. Owner holds the NTPUD harmless as set forth herein and agrees to pay for the services as set forth herein.

In making such request, Owner understands and agrees that the NTPUD's charges and costs for

performing the work may be substantially higher than the cost of having said work performed by others, that the costs of materials and supplies provided by the NTPUD may be higher than the cost of obtaining said materials and supplies from others, and that, even though the NTPUD may conduct activities during normal work hours, work will be charged at overtime rates because NTPUD personnel will have to be diverted from other scheduled activities which will then have to be completed during overtime conditions.

Owner shall be solely responsible for all required permits and for the costs of any compliance with the provisions of the California Environmental Quality Act associated with any and all NTPUD activity, including costs of defending any challenges to such compliance, including attorney's fees.

2. SCOPE AND METHOD OF WORK TO BE PERFORMED BY NTPUD

The NTPUD shall have full discretion and authority to determine the appropriate means and methods for resolving the repair in its sole discretion. Owner agrees to pay all NTPUD personnel and equipment costs that are necessary to resolve the repair, including any environmental clean-up if necessary. Notwithstanding the above, Owner understands and agrees that all work and services provided by the NTPUD are provided on an "as-is" basis without any warranty of fitness for any particular purpose or any other warranty.

3. PAYMENT BY OWNER

All work performed by the NTPUD performed pursuant to this Agreement shall be on a time and material basis at such hourly rates, material costs, and surcharges as NTPUD shall in its sole discretion determine. NTPUD shall provide Owner with an itemized invoice outlining the repair costs. Owner agrees to promptly pay such repair invoice within thirty (30) days. Owner understands and agrees that said repair costs shall be considered a service charge in the same manner that a sewer monthly service charge is considered a service charge, shall be subject to the same late fees and penalties applicable to monthly sewer service charges, and shall be subject to being collected with property taxes if delinquent.

4. INDEMNIFICATION, WAIVER OF LIABILITY/CLAIMS AND HOLD HARMLESS

A. Owner agrees to hold harmless from and to defend and indemnify and pay to the North Tahoe Public Utility District ("NTPUD"), its directors, officers, agents, employees and independent consultants (the "Indemnified Parties") any and all damages, costs or expenses of any nature or kind which may be suffered or incurred by the Indemnified Parties as a result of the action or inaction of Owner, its tenants, agents, employees, representatives or independent contractors, successors or by any third party as a direct or indirect result of any and all efforts put forth by the NTPUD to mitigate sewage discharging from property or properties of the Owner. This agreement to Indemnify and Hold Harmless shall extend to and include: (i) attorney's fees, expert witness fees and reasonable costs incurred in defending the Indemnified Parties; (ii) claims that the Indemnified Parties have acted negligently or unreasonably failed to act; and (iii) any fines or civil penalties assessed against the Indemnified Parties by the State of California or any agency thereof.

B. Owner on behalf of itself, and on behalf of its successors in interest and occupants of the Property agrees that it (a) waives any and all known and unknown claims for damages or injury to the Property or to the person or health of Owner or its tenants, agents, employees, representatives or independent contractors, successors or by any third party to the extent the claims arise out of the

actions or inaction by the NTPUD to mitigate sewage discharge from Owner's Property, and (b) assumes all risk of damage, destruction, flooding, impairment of value or reduction of value arising from aforementioned mitigation, including but not limited to overflows, leaks, failures or any other condition relating to NTPUD's mitigation activities. Owner agrees to defend the NTPUD and other Indemnified Parties from any claim arising from any above-described causes or events.

C. Owner in electing to request the NTPUD to work on the Property has been provided with a full opportunity to independently investigate the likelihood of damage, injury to persons, or expense arising from NTPUD's activities, whether such damage or injury should occur due to negligence or unreasonable failure to act by the NTPUD or the Indemnified Parties and assumes the full risk thereof. In making such investigation, Owner has not relied upon any representations of the NTPUD or its directors, officers, agents, employees and independent consultants.

5. This Agreement shall be governed by and construed in accordance with the laws of the State of California. Venue shall be within the Tahoe Judicial District of the County of Placer.

6. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof. No representations and agreements modifying or supplementing the terms of this agreement will be valid unless in writing, signed by persons authorized to sign agreements on behalf of both parties.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed in duplicate by their respective officials thereunto duly authorized.

Dated: _____

NORTH TAHOE PUBLIC UTILITY DISTRICT

OWNER

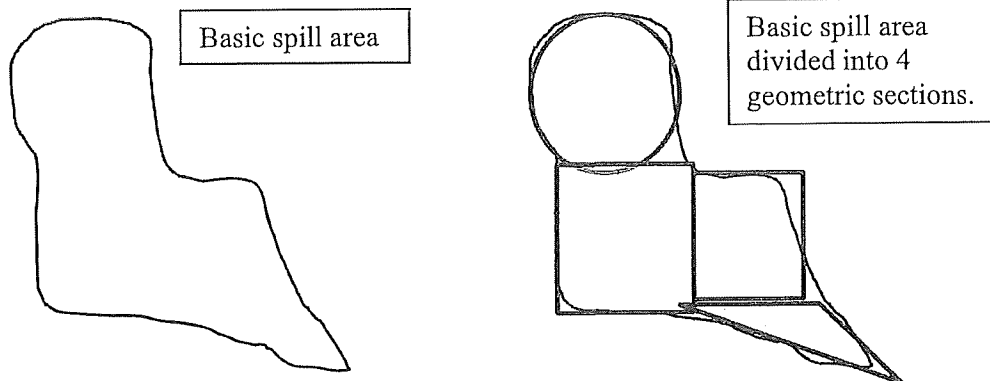
Dated: _____

**Tab 5 – Spill Response Plan
June 2, 2023**

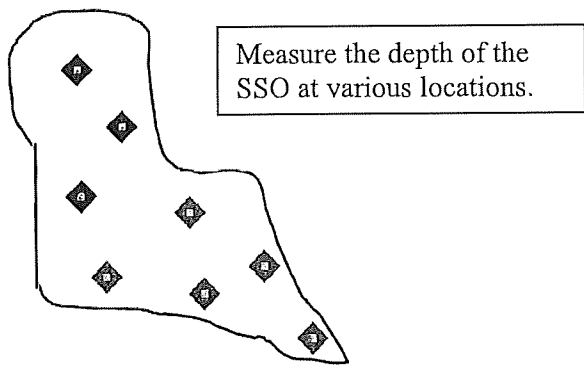
Volume Estimation Methods and Reference Photos

Not all SSOs will conform to a specific shape. When this occurs, break up the area of the SSO into various shapes or segments, then calculate the amount of wastewater spilled in each segment, adding them together to arrive at the total spill volume.

Example:



Determine the area of each of the geometric sections adding them all together to determine the total area of the spill.



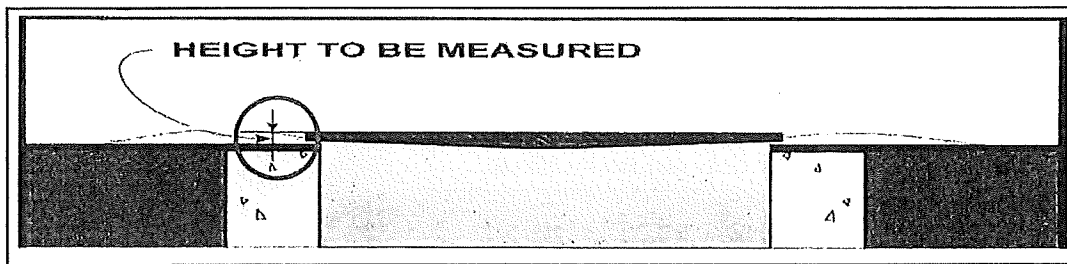
Where it is difficult to measure wet spots on asphalt, use a depth of 0.0026' or 1/32". For wet spots on concrete use depths of 0.0013' or 1/64" for reasonable estimates.

Inch to Feet Conversion:	
Inches	to Feet
1/8"	= 0.01'
1/4"	= 0.02'
3/8"	= 0.03'
1/2"	= 0.04'
5/8"	= 0.05'
3/4"	= 0.06'
7/8"	= 0.07'
1"	= 0.08'
2"	= 0.17'
3"	= 0.25'
4"	= 0.33'
5"	= 0.42'
6"	= 0.50'
7"	= 0.58'
8"	= 0.67'
9"	= 0.75'
10"	= 0.83'
11"	= 0.92'
12"	= 1.00'

Sample Calculation:
A 20 ft x 20 ft square wet spot on concrete equals 3.9 gal and for asphalt is 7.8 gal.

Manhole Ring

Some manhole covers in use today typically only have one pick hole forcing most of the wastewater to escape from the perimeter of the manhole cover during higher flow SSOs. To estimate the volume in this example, measure the observed height of the wastewater plume exiting the manhole cover. Find the height and manhole diameter on the Manhole with Cover in Place to determine the flow rate escaping the manhole. The chart has two columns, one for 24-inch diameter covers and one for 36-inch diameter covers. Wastewater will also be escaping from the pick hole and must be accounted for separately by following the instructions for estimating an SSO from pick/vent hole. Multiply the flow rate times the number of holes that are discharging. The total estimated rate (gpm) is determined by adding together the rate being lost (gpm) from around the cover with the rate being lost (gpm) from the pick and/or vent hole(s). Once the total rate (gpm) has been determined, multiply the gpm by the duration of the SSO in minutes. This will result in the total estimated gallons of the SSO.



Example: The measured height of the plume exiting the ring of a 36-inch manhole is 1 inch. The total volume per minute would be 13 gpm from around the ring of a 36-inch manhole cover (from the attached chart). (Calculate the amount exiting the pick hole(s) and add to the total being lost around the ring). If the SSO lasted one hour the total wastewater lost would be 780 gallons ($13 \times 60 = 780$).

Estimated loss around ring (from chart)	13 gpm
Duration of SSO	60 minutes
Total SSO (without loss from pick hole)	780 gallons
(13 gal/min x 60 minutes = 780 gallons plus amount lost from pick hole(s))	

SSO Flow Estimation Methods

Volume of the SSO can be determined using a variety of approaches. The following sections will discuss two methods that are often employed. The person preparing the estimate shall use the method most appropriate to the SSO in question. Every effort shall be made to make the best possible estimate of the volume.

Method 1 Measured Volume

This method can be used on small spills if it is not raining.

Step 1: Sketch the shape of the spill that is contained.

Step 2: Measure the length and width.

Step 3: Measure the depth in several locations.

Step 4: Convert all dimensions to feet.

$$\text{Feet} = \text{inches}/12$$

Step 5: Calculate the area using the following formulas.

$$\text{Rectangle Area} = \text{Length} \times \text{Width}$$

$$\text{Circle Area} = \text{Diameter} \times \text{Diameter} \times 0.785$$

$$\text{Triangle} = \text{Base} \times \text{Height} \times 0.5$$

Step 6: Multiply the area times the depth to get the volume.

$$\text{Volume ft}^3 = \text{Area} \times \text{Depth}$$

Step 7: Multiply the volume by 7.5 gallons/ft³ to convert it to gallons.

$$\text{Gallons} = \text{Volume} \times 7.5 \text{ gallons/ft}^3$$

Method 2 Duration and Flow Rate

Duration: The duration is the total elapsed time from when the SSO started until it stops.

Flow Rate: The rate at which the SSO is flowing. Usually expressed as gallons per second (GPS) or gallons per minute (GPM) or gallons per hour (GPH).

Open channel flow: Often overflows run into nearby dry ditches or street gutters. Total volume, gallons, of flow can be quantified by measuring the cross-sectional area and speed of the flow. Measure a set distance paralleling the SSO flow route. Measure, in inches, the midway width and depth of the flow over this distance. Then measure the time, in seconds, it takes a float to travel the set distance. Record total time of the SSO flow.

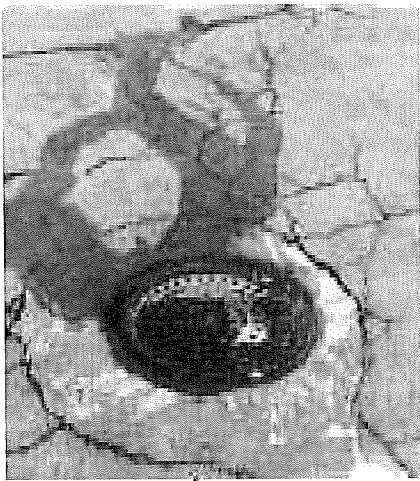
Calculate the total SSO volume of the following example:

Example: After measuring off a set distance of 20 feet, it was determined that the float took 20 seconds to travel this 20 feet. The width and depth at the midway point of the flow was 28 inches and 3 inches, respectfully. The total time of the SSO flow was 20 minutes. What is the total volume, gallons, of this SSO event?

$$\begin{aligned}\text{Total Volume (gal)} &= \text{Velocity (ft/sec)} \times \text{Area (ft}^2\text{)} \times \text{total time (seconds)} \times 7.5 \text{ gal/ ft}^3 \\ &= 20\text{ft}/20\text{sec.} \times (28 \times 3)/144 \text{ ft}^2 \times (20\text{min.} \times 60\text{sec. /min.}) \times 7.5 \text{ gal/ ft}^3 \\ &= 1 \times 0.58 \times 1200 \times 7.5\text{gal} \\ &= 5,220 \text{ gallons}\end{aligned}$$

Pump Stations: SCADA systems can provide flow or pump run time data for sewer and storm water pump stations. Pump curves may need to be obtained to determine flow rates. The flow rates can be used to determine flow volumes. Contact the city's Treatment Plant Mechanics to obtain SCADA data.

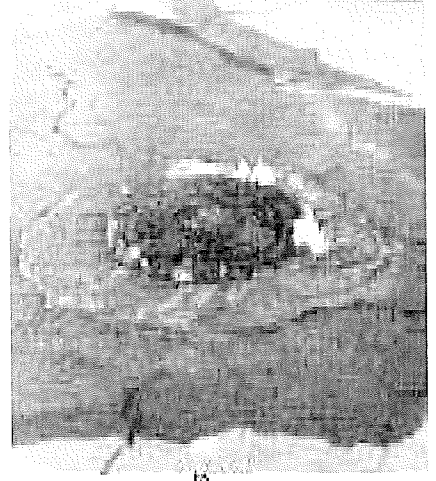
SSO Flow Estimation Pictures (see next page): Provides pictures of sewage flowing from a manhole cover at a variety of flow rates. Observations by the responding utility maintenance crew are used to select the appropriate flow rate from the chart.



5gpa



25gpa



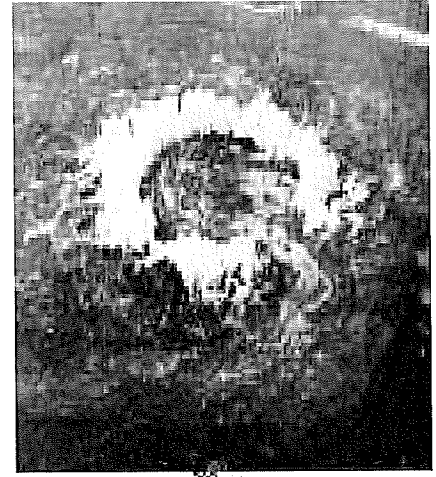
50gpa



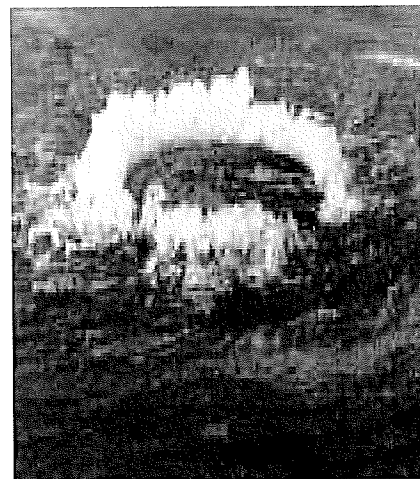
100gpa



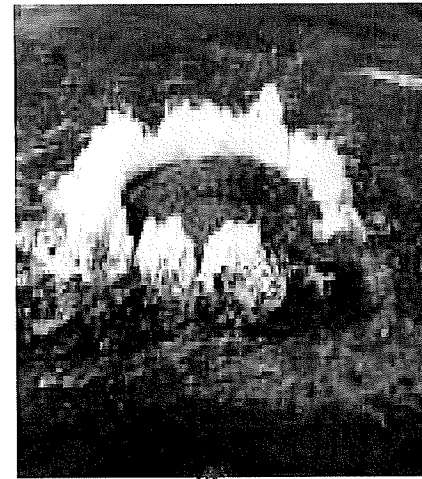
150gpa



200gpa



225gpa



250gpa



275gpa

SSO Flow Estimation Methods

A variety of approaches exist for the estimation of the volume of a sanitary sewer overflow. This appendix documents four methods that are most often employed. Other methods are also possible. The person preparing the estimate shall use the method most appropriate to the SSO in question using their judgment. In any event, every effort shall be made to make the best possible estimate of the volume.

Method 1 Measured Volume

The volume of some small spills can be estimated using this method if it is not raining. In addition, the shape, dimensions, and depth of the spilled wastewater are needed. The shape and dimensions are used to calculate the area of the spills and the depth is used to calculate the volume.

Step 1 Sketch the shape of the contained sewage

Step 2 Measure or pace off the dimensions.

Step 3 Measure the depth in several locations

Step 4 Calculate an average depth for the entire area by adding all measured depths together and dividing by the number of measurements taken.

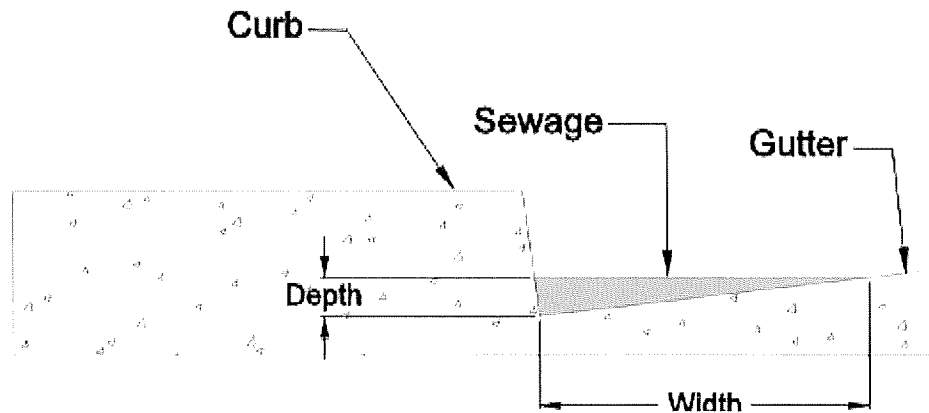
Step 5 Convert the dimensions, including depth to feet.

Step 6 Calculate the area using the following formulas:

Rectangle Area = length x width

Circle Area = diameter x diameter x 0.785

Triangle Area = base x height x 0.5 (for a gutter see figure below)



$$\text{Volume (gal)} = \text{length} \times \text{width} \times \text{depth} \times 3.74$$

Step 7 Multiply the area times the depth

Step 8 Multiply the volume by 7.5 to convert it from cubic feet to gallons

Method 2 Duration and Flow Rate

Calculating the volume of spills where it is difficult or impossible to measure the area and depth requires a different approach. In this method separate estimates are made of the duration of the spill and the flow rate. The methods of estimating duration and flow rate are:

Duration: The duration is the elapsed time from the start time to the time the spill stopped.

Start time is sometimes difficult to establish. Here are two approaches:

For very large overflows, changes in flow on a downstream flow meter can be used to establish the start time. Typically the daily flow peaks are "cut off" or flattened by the loss of flow. This can be identified by comparing hourly flow data.

Conditions at the spill site change with time. Initially there will be limited deposits of grease and toilet paper. After a few days to a week, the grease forms a light colored residue. After a few weeks to a month the grease turns dark. In both cases the quantity of toilet paper and other materials of sewage origin increase in amount. These changes with time can be used to estimate the start time in the absence of other information.

Sometimes it is simply not possible to estimate the start time.

End time is usually much easier to establish. Field crews on-site observe the "blow down" that occurs when the blockage has been removed. The "blow down" can also be observed in downstream flow meters.

Flow Rate: The flow rate is the average flow left in the sewer system during the time the spill stopped. There are three ways to estimate the flow rate:

Open Channel Flow: Often overflows run into nearby ditches, channels, gutters etc. Flow can be quantified by measuring the cross-sectional area and velocity of the flow. Measure the depth of water and dimensions the channel. Then measure the velocity by dropping a tennis ball or other floating object and measuring the time it takes to travel a set distance. The resulting velocity measurement will be in feet per second. Several measurements should be taken during the duration of the overflow as conditions are likely change. Calculate the formula using the following formula:

$$\text{Flow (Q), ft}^3/\text{sec} = \text{Velocity (V), ft/sec} \times \text{Area (A), ft}^2$$

Pump Stations: Stormwater and sewer pump stations often have flow or pump run time data available through a SCADA system. Pump curves may need to be obtained to determine the flow rates. The flow rates can be used to determine flow volumes.

SSO Flow Estimation Pictures: Pictures presented in this appendix show the sewage flowing from a manhole cover for a variety of flow rates. The observations of the field crew are used to select the approximate flow rate from the chart.

Flow meter: Changes in flows in the downstream flow meters can be used to estimate the flow rate during the spill (better for large SSOs),

Estimate based on up-stream connections: Once the location of the spill is known, the number of upstream connections can be determined from the field books. Multiply the number of connection by 200 to 250 gallons per day per connection or 8-10 gallons per hour per connection, or other flow rates that are consistent with an agency's data for its connections.

The volume of small spills can be estimated by visualizing the amount of water in a bucket or a barrel. A bucket contains 5 gallons and a barrel contains 50 gallons. Observe the spill area and then estimate the total volume. If the spill is larger than 50 gallons, try to break the standing water into barrels and then multiply by 50 gallons.

Once duration and flow rate have been estimated, the volume of the spill is the product of the duration in hours or days times the flow rate in gallons per hour or gallons per day.

Tab 6 – Spill Response Plan
June 2, 2023

Mutual Aid Districts and Agreement

Tahoe Truckee Area Agreement for Mutual Emergency Aid (2022)

Participating Agencies

- a. Alpine Springs County Water District
- b. Douglas County Lake Tahoe Sewer Authority
- c. Douglas County Utilities
- d. Edgewood Water Company
- e. Glenbrook Water Cooperative
- f. Incline Village General Improvement District
- g. Kingsbury General Improvement District
- h. Lakeside Park Association
- i. North Tahoe Public Utility District
- j. Northstar Community Services District
- k. Olympic Valley Public Service District
- l. Round Hill General Improvement District
- m. Sierra Lakes County Water District
- n. South Tahoe Public Utility District
- o. Tahoe City Public Utility District
- p. Tahoe Douglas Sewer District
- q. Tahoe Truckee Sanitation District
- r. Truckee Donner Public Utility District
- s. Truckee Sanitary District

TAHOE TRUCKEE AREA AGREEMENT FOR MUTUAL EMERGENCY AID

This Agreement for Mutual Aid is to benefit the participating agencies in the event of natural disasters, emergencies, or other assistance that may be requested. The participating agencies have confirmed that a mutual aid agreement would be beneficial.

This Agreement is made and entered into on the dates set forth below, by and between the public agencies set forth below.

WHEREAS, the participating agencies party to this Agreement maintain and operate wastewater and/or water treatment and distribution, collection, transportation and/or treatment facilities in the Lake Tahoe-Truckee areas; and

WHEREAS, the participating agencies have engaged in an informal policy of mutual cooperation wherein the resources of each were available to the other on an as-available basis for the purposes of minimizing environmental damage due to leakage from or destruction of such facilities and of promoting public health; and

WHEREAS, it is the desire of the participating agencies to execute a mutual aid agreement wherein the policy of mutual cooperation is formalized and expanded to meet projected needs of the participating agencies; and

WHEREAS, by becoming a participating agency under the terms of this Agreement, the governing body or board of the participating agency will be deemed to have read and agreed to be bound by the terms of this Agreement.

NOW, THEREFORE, the participating agencies hereto mutually agree as follows:

1. To furnish to each other personnel trained in the emergency operation and/or repair of wastewater and/or water treatment, distribution, collection, and/or transportation facilities, together with equipment, materials and supplies required for such operation and/or repair as may be necessary during emergency conditions, on and subject to the terms and conditions of this Agreement.
2. To provide such emergency aid within the ability of the participating agencies to this Agreement, provided, however, that no participating agency shall be required to deplete its own resources, personnel, services or facilities to the detriment of its normal responsibilities or the detriment of anticipated needs. No agency shall incur any liability or be found at fault for failure to furnish personnel, equipment, materials or supplies when such are available. In addition, each agency shall have the right, at the sole discretion of said agency, to order any personnel, equipment, materials or supplies furnished to another agency be returned to the furnishing agency, without any liability for said order.

3. That no response to an emergency aid request provided for in this Agreement will be made by any participating agency hereto unless such request is received through established communication channels and made by a previously designated responsible official of the agency requesting such aid. The Manager of each participating agency shall be deemed a responsible official and shall have the authority to designate alternate responsible officials to other participating agencies. No such designation shall be effective until received, in writing, by the other participating agencies.
4. The personnel and equipment furnished by a participating agency (the "Assisting Agency") shall remain, at all times, under the direct supervision and control of the designated supervisory personnel of the Assisting Agency. In instances where only equipment, materials or supplies are provided by the Assisting Agency, the ownership of said equipment, materials or supplies shall remain with the Assisting Agency and said equipment, materials or supplies shall be returned to the Assisting Agency immediately upon request (unless to the extent that the materials or supplies are perishables and they have been used or exhausted in the emergency response). Representatives of the participating agency receiving assistance from the Assisting Agency (the "Requesting Agency") shall suggest work assignments and schedules for the personnel of the Assisting Agency; however, the designated supervisory personnel of the Assisting Agency shall have the exclusive responsibility and authority for assigning work and establishing work schedules for the personnel of the Assisting Agency in conjunction with the Incident Command or the Requesting Agency. The designated supervisory personnel of the Assisting Agency shall maintain daily personnel time records, a log of equipment hours, be responsible for the operation and maintenance of the equipment, materials or supplies furnished by the Assisting Agency, and report work progress to the Requesting Agency.
5. Unless specifically instructed otherwise, the Requesting Agency shall have the responsibility of providing food and housing for the personnel of the Assisting Agency from the time of their arrival at the designated location to the time of their departure. However, Assisting Agency personnel and equipment should be, to the greatest extent possible, self-sufficient while working in the emergency or disaster area. The Requesting Agency may specify only self-sufficient personnel and resources in its request for assistance.
6. Should it be necessary to recover costs or in order to be reimbursed from outside sources, at the sole discretion and request of the Assisting Agency, the Requesting Agency shall pay the Assisting Agency monthly, on receipt of invoice, costs for the equipment, personnel, materials and supplies furnished. Equipment costs shall be reasonable and subject to each participating agency's established rates. If a participating agency does not have established rates, either actual cost or the most current Schedule of Equipment Rates set by the Federal Emergency Management Agency (FEMA) shall apply. Some

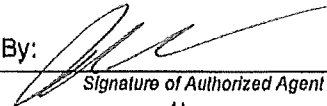
participating agencies may require operators to accompany their equipment and therefore the rate may include operator labor costs. All labor will be billed at actual rate paid plus benefits. All expendable materials and supplies will be billed at cost.

7. Any controversy or claim arising out of or relating to this Agreement or the breach thereof, shall be settled by mutual agreement. If dispute cannot be settled by mutual agreement, then dispute shall be settled by arbitration in accordance with the Rules of the American Arbitration Association and judgment on the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof. Arbitration is binding and final.
8. The Assisting Agency and its workers' compensation insurer or self-insurer will be liable for any workers' compensation benefits payable on account of an injury or illness to an Assisting Agency employee occurring in the course of providing personnel assistance under this Agreement. The Assisting Agency and its property damage insurer or self-insurer will be liable for any damage to or destruction of any Assisting Agency equipment, material or supplies occurring in the course of furnishing the equipment, material or supplies under this Agreement. The Requesting Agency shall indemnify, defend, protect and hold harmless the Assisting Agency, and its officers, employees, and agents, from and against any Requesting Agency or third party liability, loss, claim, damage, expense, demand, and costs (including, but not limited to, attorney, expert witness and consultant fees, and litigation costs) of every nature arising out of the Assisting Agency's assistance provided under this Agreement, except when caused by the sole negligence or willful misconduct of the Assisting Agency or as otherwise provided or limited by law.
9. That each agency shall maintain coverage for liability, property damage, and worker's compensation for industrial injury or illness through insurance or self-insurance, including coverage for its equipment and employees when used by other agencies under this Agreement. Any participating agency to this Agreement shall have the right to evidence of such coverage upon request.
10. That this Agreement shall not operate to merge any of the participating agencies hereto, to subject any of the participating agencies hereto to the jurisdiction of any regulatory agency not having jurisdiction in the absence of this Agreement, or to require that any participating agency cooperate with or report to any agency not a party to this Agreement.
11. That this Agreement shall become effective as to each participating agency upon execution by that agency and shall remain in full force and effect as to each participating agency until a participating agency terminates its participation in the Agreement. Any participating agency may terminate its rights and obligations under this Agreement by giving all other participating agencies thirty (30) days prior written notice, however such termination shall not affect the rights and

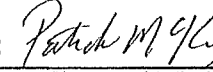
obligations of the remaining participating agencies hereto or any rights and obligations of the withdrawing participating agency occurring prior to the effective date of termination.

IN WITNESS WHEREOF, the participating agencies hereto have caused this Agreement to be executed as of the days and years set forth below.

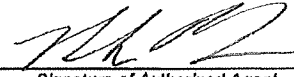
ALPINE SPRINGS COUNTY WATER DISTRICT

By: 
Signature of Authorized Agent
Joe Mueller General Manager
Print or Type Name and Title
1-5-2022
Date


EDGEWOOD WATER COMPANY

By: 
Signature of Authorized Agent
PATRICK MCKEEL
Print or Type Name and Title
6-1-2022
Date


DOUGLAS COUNTY LAKE TAHOE SEWER AUTHORITY

By: 
Signature of Authorized Agent
ROB HOPKINS - MANAGER
Print or Type Name and Title
06.08.2022
Date

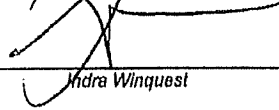
GLENBROOK WATER COOPERATIVE

By: 
Signature of Authorized Agent
Diane Rogers Bus. Manager
Print or Type Name and Title
9/17/2021
Date


DOUGLAS COUNTY UTILITIES

By: 
Signature of Authorized Agent
Thomas White
Print or Type Name and Title
6-1-22
Date


INCLINE VILLAGE GENERAL IMPROVEMENT DISTRICT

By: 
Signature of Authorized Agent
Andra Winquest
General Manager, Incline Village GID
7/22/2021
Date

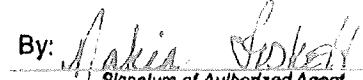
KINGSBURY GENERAL IMPROVEMENT DISTRICT

By: 
Signature of Authorized Agent
James E. Dwyer, General Manager
Print or Type Name and Title
8/11/21
Date


OLYMPIC VALLEY PUBLIC SERVICE DISTRICT

By: 
Signature of Authorized Agent
Michael Geary, General Manager
Print or Type Name and Title
Jan. 5, 2022
Date


LAKESIDE PARK ASSOCIATION

By: 
Signature of Authorized Agent
Nakil Joske, WATER MANAGER
Print or Type Name and Title
Sept. 8, 2021
Date

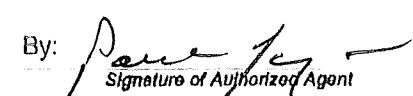
ROUND HILL GENERAL IMPROVEMENT DISTRICT

By: 
Signature of Authorized Agent
Andrew Johnson, District Manager
Print or Type Name and Title
07/20/2021
Date

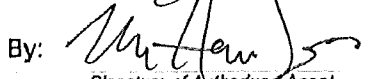
NORTH TAHOE PUBLIC UTILITY DISTRICT

By: 
Signature of Authorized Agent
Beagle, A. Jones, GENERAL MANAGER
Print or Type Name and Title
08/11/2021
Date


SIERRA LAKES COUNTY WATER DISTRICT

By: 
Signature of Authorized Agent
Paul Schultz
Print or Type Name and Title
6/23/22
Date

**NORTHSTAR COMMUNITY SERVICES DISTRICT
Placer County Service Area No. 21,
Northstar**

By: 
Signature of Authorized Agent
General Manager
Print or Type Name and Title
1/3/22
Date

SOUTH TAHOE PUBLIC UTILITY DISTRICT

By: 
Signature of Authorized Agent
John Thiel, General Manager
Print or Type Name and Title
9/23/2021
Date

TAHOE CITY PUBLIC UTILITY DISTRICT

By: [Signature]
Signature of Authorized Agent
Tony Laloties, Director of Utilities
Print or Type Name and Title
July 16, 2021
Date

TRUCKEE SANITARY DISTRICT (See next page)

~~By: _____
Signature of Authorized Agent

Print or Type Name and Title

Date~~

TAHOE DOUGLAS SEWER DISTRICT

By: [Signature]
Signature of Authorized Agent
[Signature]
Print or Type Name and Title
6-8-22
Date

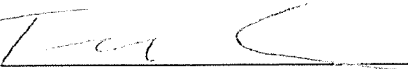
TAHOE - TRUCKEE SANITATION AGENCY

By: [Signature]
Signature of Authorized Agent
LARUE GRIFFIN, GEN. MGR.
Print or Type Name and Title
1/5/22
Date

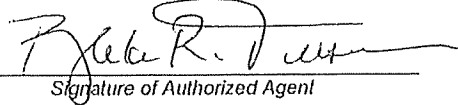
TRUCKEE DONNER PUBLIC UTILITY DISTRICT

By: Brian C. Wright
Signature of Authorized Agent
Brian C. Wright General Manager
Print or Type Name and Title
11/29/2022
Date

TAHOE CITY PUBLIC UTILITY DISTRICT

By: 
Signature of Authorized Agent
Tony Lalotis, Director of Utilities
Print or Type Name and Title
July 16, 2021
Date

TRUCKEE SANITARY DISTRICT

By: 
Signature of Authorized Agent
Blake R. Tresan, General Manager/Chief Engineer
Print or Type Name and Title
August 16, 2021
Date

~~**TAHOE DOUGLAS SEWER DISTRICT**~~

(See previous page)

~~By: _____
Signature of Authorized Agent

Print or Type Name and Title

Date~~

~~**TAHOE - TRUCKEE SANITATION AGENCY**~~

(See previous page)

~~By: _____
Signature of Authorized Agent

Print or Type Name and Title

Date~~

~~**TRUCKEE DONNER PUBLIC UTILITY DISTRICT**~~

(See previous page)

~~By: _____
Signature of Authorized Agent

Print or Type Name and Title

Date~~

**Tab 7 – Spill Response Plan
June 2, 2023**

Emergency Dump Manhole Maps

DUMP PLAN

FOR OUTSIDE TANKERS and/or VACTOR STYLE HAULERS TO FIND THEIR
DUMP SITE LOCATION

EACH SITE WILL BE MARKED WITH BARRICADES AND DELINEATORS
BEFORE YOU ARRIVE.

MAPS ATTACHED WILL IDENTIFY MH LOCATIONS WITH EASY ACCESS

THANK YOU FOR YOUR HELP

EMERGENCY #'S

BOB ORR (UTILITY OPERATIONS SUPERINTENDENT)

(530) 414-3863

TOBY ROBINSON (CREW CHIEF)

(775)781-7402

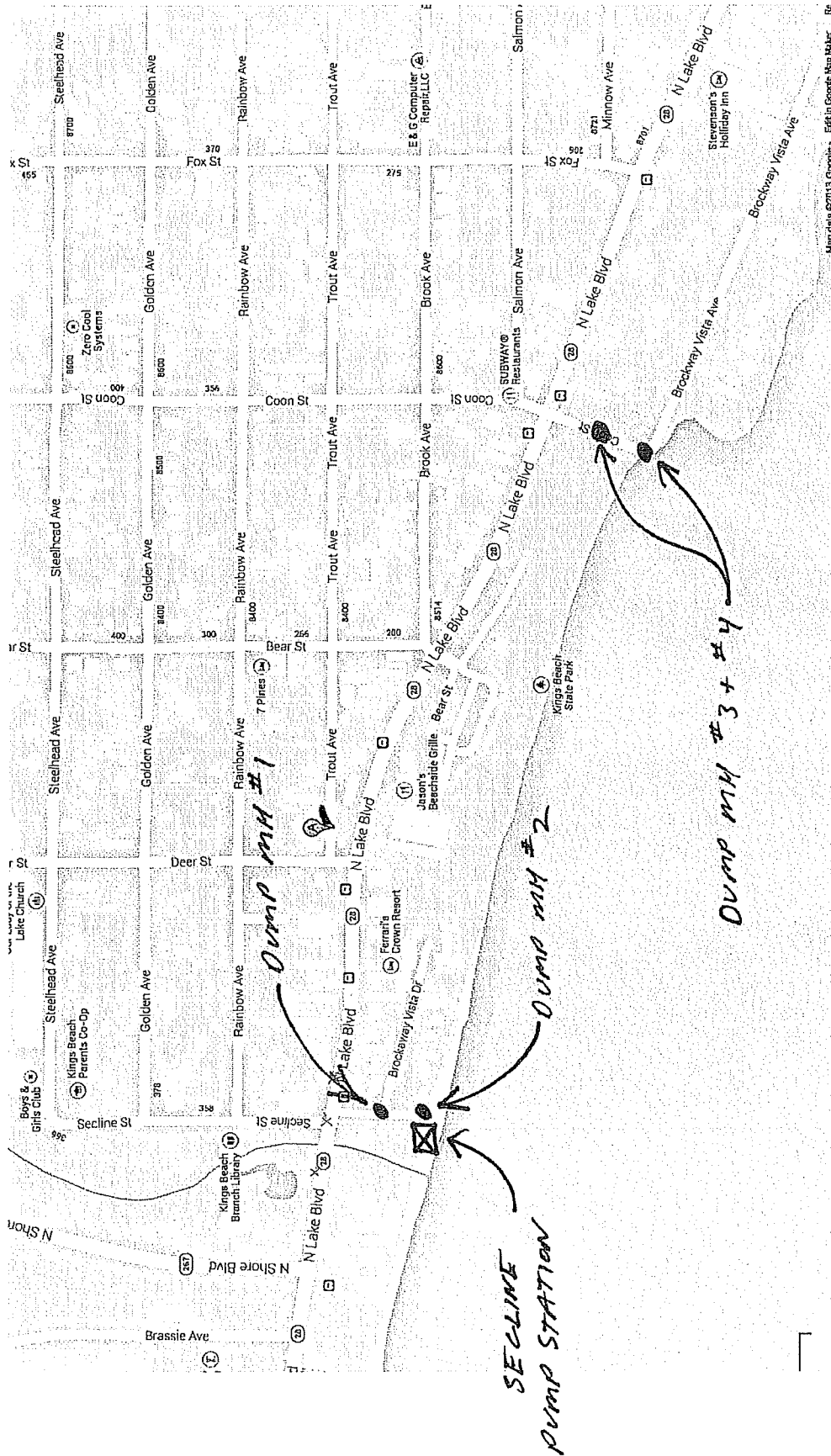
PAUL SANDHOFNER (CREW CHIEF)

(530) 392-0243

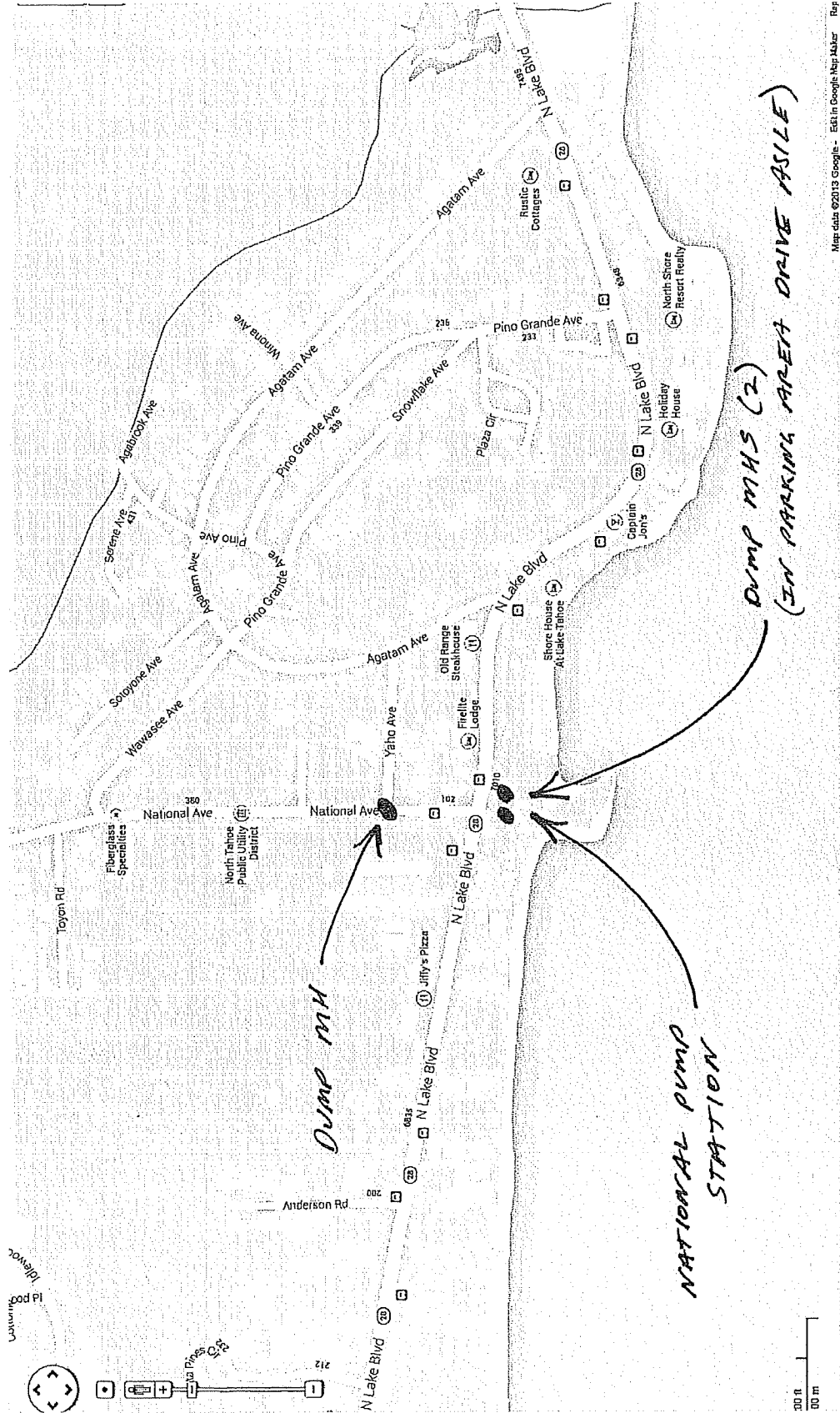
KEN FISCHER (OPERATIONS MANAGER)

(775) 790-5597

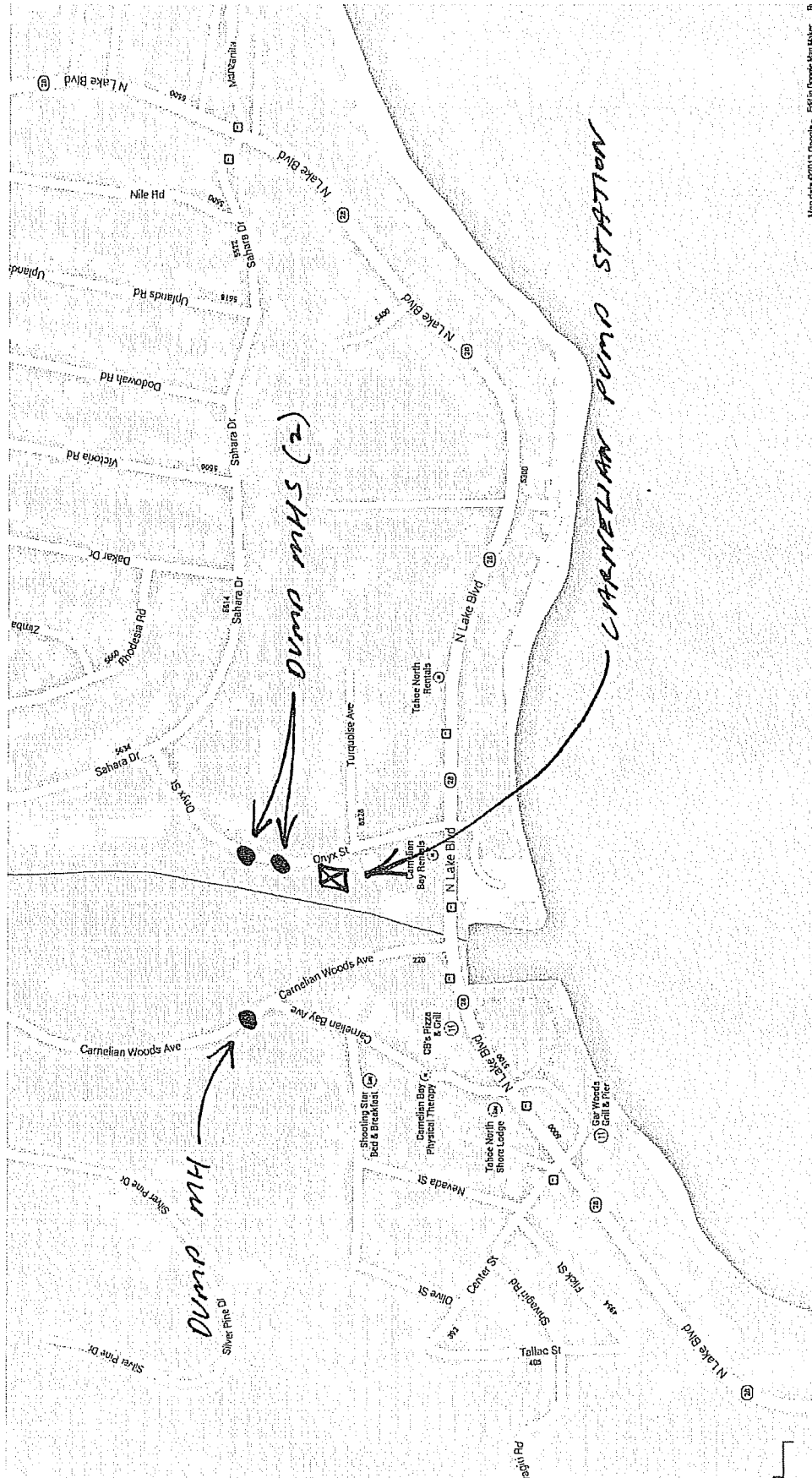
SECLINE & COON DUMP MAHHOLES



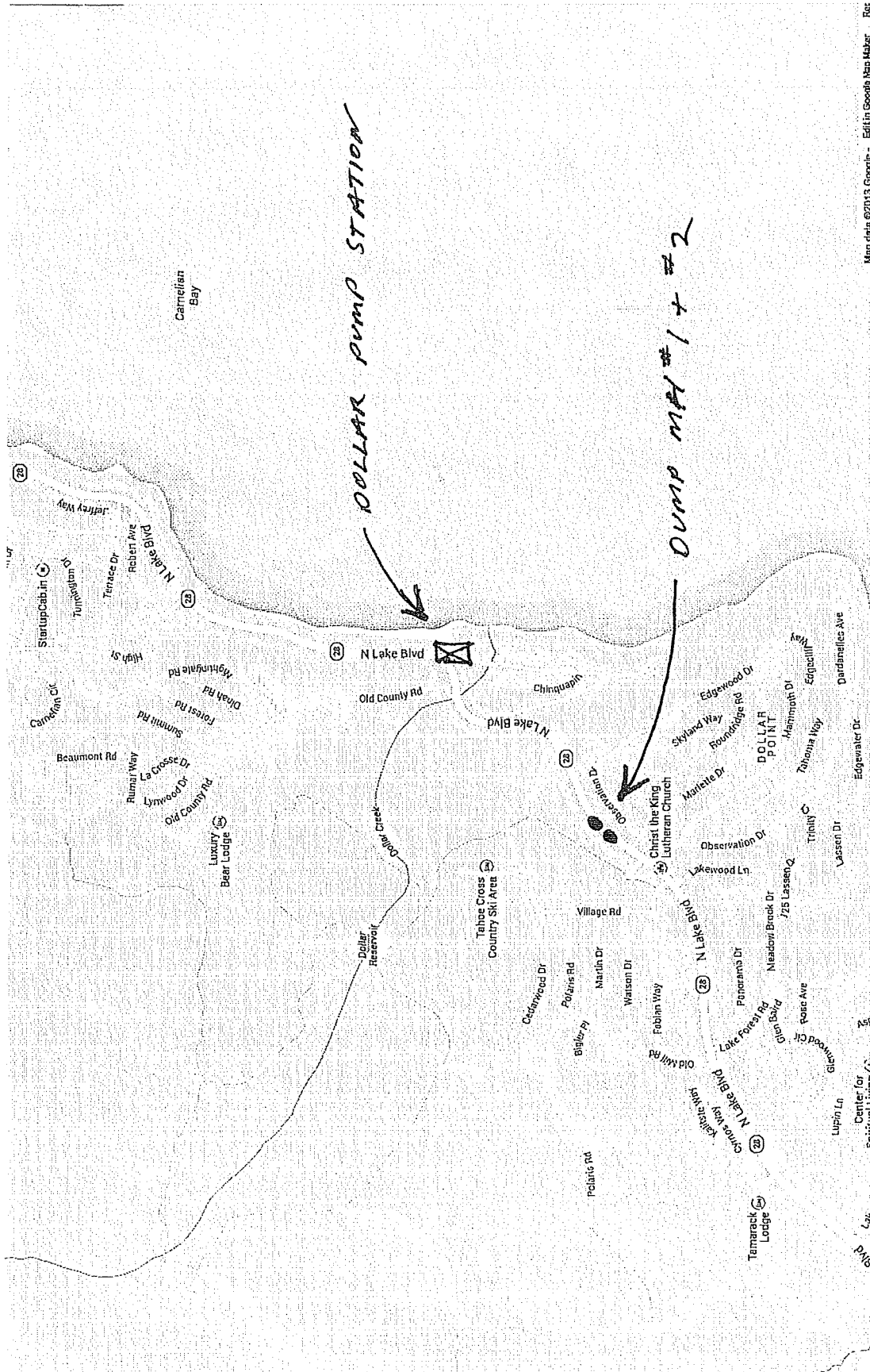
NATIONAL DUMP MAHHOLES



CARNELIAN DUMP MANHOLES



TOP OF DOLLAR HILL DUMP MANHOLE



Tab 8 – Spill Response Plan June 2, 2023

Receiving Water Water Quality Sampling and Analysis

1. Regulatory Language
2. Procedure
3. Documentation Form

2.3.2. Receiving Water – Water Quality Sampling and Analysis

For sewage spills in which an estimated 50,000 gallons or greater are discharged into a surface water, the Enrollee shall conduct the following water quality sampling no later than **18 hours** after the Enrollee's knowledge of a potential discharge to a surface water:

- Collect one water sample, each day of the duration of the spill, at:

The DCS-001 location as described in section 2.3.4 (Receiving Water Sampling Locations) of this Attachment, if sewage discharges to a surface water via a drainage conveyance system; and/or

Each of the three receiving water sampling locations in section 2.3.4 (Receiving Water Sampling Locations) of this Attachment

If the receiving water has no flow during the duration of the spill, the Enrollee must report "No Sampling Due To No Flow" for its receiving water sampling locations. The Enrollee shall analyze the collected receiving water samples for the following constituents per section 2.3.3 (Water Quality Analysis Specifications) of this Attachment:

- Ammonia, and
- Appropriate bacterial indicator(s) per the applicable Basin Plan water quality objectives, including one or more of the following, unless directed otherwise by the Regional Water Board:
 - Total Coliform Bacteria
 - Fecal Coliform Bacteria
 - E-coli
 - Enterococcus

Dependent on the receiving water(s), sampling of bacterial indicators shall be sufficient to determine post-spill (after the spill) compliance with the water quality objectives and bacterial standards of the California Ocean Plan or the California Inland Surface Water Enclosed Bays, and Estuaries Plan, including the frequency and/or number of post-spill receiving water samples as may be specified in the applicable plans.

The Enrollee shall collect and analyze additional samples as required by the applicable Regional Water Board Executive Officer or designee.

2.3.3. Water Quality Analysis Specifications

Spill monitoring must be representative of the monitored activity (40 Code of Federal Regulations section 122.41(j)(1)).

Sufficiently Sensitive Methods

Sample analysis must be conducted according to sufficiently sensitive test methods approved under 40 Code of Federal Regulations Part 136 for the sample analysis of pollutants. For the purposes of this General Order, a method is sufficiently sensitive when the minimum level of the analytical method approved under 40 Code of Federal Regulations Part 136 is at or below the receiving water pollutant criteria.

Environmental Laboratory Accreditation Program-Accredited Laboratories

The analysis of water quality samples required per this General Order must be performed by a laboratory that has accreditation pursuant to Article 3 (commencing with section 100825) of Chapter 4 of Part 1 of Division 101 of the Health and Safety Code. (Water Code section 13176(a).) The State Water Board accredits laboratories through its Environmental Laboratory Accreditation Program (ELAP).

2.3.4. Receiving Water Sampling Locations

The Enrollee shall collect receiving water samples at the following locations.

Sampling of Flow in Drainage Conveyance System (DCS) Prior to Discharge

Sampling Location	Sampling Location Description
DCS-001	A point in a drainage conveyance system before the drainage conveyance system flow discharges into a receiving water.

Receiving Surface Water Sampling (RSW)¹

Sampling Location	Sampling Location Description
RSW-001 Point of Discharge	A point in the receiving water where sewage initially enters the receiving water.
RSW-001U: Upstream of Point of Discharge	A point in the receiving water, upstream of the point of sewage discharge, to capture ambient conditions absent of sewage discharge impacts.
RSW-001D: Downstream of Point of Discharge	A point in the receiving water, downstream of the point of sewage discharge, where the spill material is fully mixed with the receiving water.

1) The Enrollee must use its best professional judgment to determine the upstream and downstream distances based on receiving water flow, accessibility to upstream/downstream waterbody banks, and size of visible sewage plume.

2.4. Safety and Access Exceptions

If the Enrollee encounters access restrictions or unsafe conditions that prevents its compliance with spill response requirements or monitoring requirements in this General Order, the Enrollee shall provide documentation of access restrictions and/or safety hazards in the corresponding required report.

SSO Water Quality Monitoring Plan (i.e. Program)

(per SWQCB WDR MRP Order 2013-0058-EXEC)

** Required for Sewer Spills in which **50,000 gallons or more** are spilled into Surface Waters.**

** Implement Plan a **minimum of 18 hours** after becoming aware of SSO **

** All instruments and devices used shall be properly maintained and calibrated (with supporting documentation) **

Protocols, Procedures, Analysis, and Lab Information:

- **Safety first:** Personal Protective Equipment as Required
- **Gather Equipment:** Sterile Sample Containers/Bottles, Labels, etc.
 - ◇ (Use same as for potable water quality sampling - 1 Qt. Jugs)
- **Take Samples at Locations as Required:** 4 per Time taken: See Regulatory language in Tab 8 (In all cases account for spill travel time and scenarios where monitoring may not be possible due to: safety, access restrictions, or other)
 1. A point in a drainage conveyance system before the drainage system flow discharges into a receiving water
 2. Point of Discharge
 3. Upstream of Point of Discharge
 4. Downstream of Point of Discharge
- **Sample Collection:** Avoid skewing of conditions
 - ◇ Collect 6" +/- below surface
 - ◇ Avoid Scum layer
 - ◇ Take near middle of creek (if applicable)
 - ◇ Etc.
- **Sample Handling:**
 - ◇ Secure and Label ID Each Sample
 - ◇ Cooler and Transport to Lab ASAP
 - ◇ Chain of custody form if applicable
- **Sample Forms & Sample ID**
 - ◇ Fill out NTPUD "SSO Response – Sample Collection, Procedures & Information" Form for each sample taken
 - ◇ Check off applicable constituents to test for (Ammonia always required)
 - ◇ Maintain Form for each sample
 - ◇ Lab will have their in-house forms, maintain both with each sample
 - ◇ (Provide NTPUD form to Lab to remain with samples –or- responsible NTPUD individual shall maintain per sample ID)
- **Sampling Constituents (For Lab):**
(Lab shall be accredited or certified)
 - ◇ Ammonia (always required) and appropriate biological indicator
 - ◇ Other as Directed by Regional Board or other regulatory agency (see NTPUD form)
- **Sample Location Mapping:** Accurately map all locations
 - ◇ Google Earth
 - ◇ USGS Topo
 - ◇ Other as applicable and/or available (i.e. use best available)
 - ◇ (Measure or pace off distances if required)

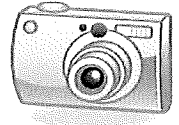
** Above all else, use common sense in order to provide accurate documentation capturing the event and conditions as varying with time lapse. Samples, Locations and Timeframes will all be assessed for accuracy and value of sampling performed.

SSO Response - Sampling Collection, Procedures & Information - Field Crew or Duty Supervisor

Within 18 Hours - Samples required if SSO to Surface Water greater than 50,000 gallons

Sampling Instructions (For Affected Waterbody):

- **Equipment As Required:** Personal Protective Equipment & Sterile Sample Containers/Bottles
- **Sub-Surface Grab Sample Requirements- 4 Samples required**
 - A point in a drainage conveyance system before the drainage system flow discharges into a receiving water
 - Point of Discharge
 - Upstream of Point of Discharge
 - Downstream of Point of Discharge
- **Collect Samples To Represent True Condition of Areas**
 - Collect at 6" below the surface
 - Avoid debris or scum layer from surface
 - Obtain from Middle of Creek or other as applicable
- **Protect and Handle Samples as Required To Represent True Condition of Areas**
 - Secure and Label as necessary
 - Cooler and Transport to Lab as necessary (6 hrs max. elapse time)
 - Chain of custody forms if applicable



SSO & Sample Information

SSO Spill Location Name: _____

Location Sample Taken: _____

Sample ID: _____

Date & Time Sample Taken: _____

Individual(s) & Organization who performed the Sampling: _____

Sample & Water Quality Analysis

<u>Parameter</u>	<u>Date/Time of Analysis</u>	<u>Technique (ASTM or Other)</u>	<u>Results</u>	<u>Individual Performing Analysis</u>
<input type="checkbox"/> Ammonia (required)	_____	_____	_____	_____
<input type="checkbox"/> Total & Fecal Coliform	_____	_____	_____	_____
<input type="checkbox"/> Enterococcus	_____	_____	_____	_____
<input type="checkbox"/> E Coli	_____	_____	_____	_____
<input type="checkbox"/> BOD	_____	_____	_____	_____
<input type="checkbox"/> pH	_____	_____	_____	_____
<input type="checkbox"/> Other: _____	_____	_____	_____	_____

Agency Results Reported to:

- County Health
- Regional Water Quality Control Board
- Other (as applicable): _____

Sketch and/or Diagrams of Sampling Area(s) & Location(s)

Appendix B – Key Performance Indicators (KPI) checklist

KPI	2012	2013	2014	2015	2016
Total number of SSOs	6	6	10	6	5
Total volume of SSOs (gal)	1293	217	1218	1346	615
Total number of SSOs in main lines	5	3	3	2	2
Total number of SSOs in lower laterals	1	3	7	4	3
Number of repeat SSOs (same location as any previous SSO, regardless of year of occurrence)	0	1	0	0	0
Total number of SSOs within the Shore zone	0	0	0	0	0
Total volume of SSOs within the Shore zone	0	0	0	0	0
Number of pump station failures	0	0	0	0	0
Number of pipe failures/roots intrusion	5	6	6	6	3
Number of human caused pipe failures	1	0	0	0	0
Length of pipe CCTVd (miles)	9.52	3.7	3.8	19.14	14.2
Percentage of total overflow volume contained or returned to sewer	90%	50%	7%	2%	95%
Number of overflows due to FOG	0	0	1	0	1
Number of FOG facilities inspected (internal)	0	0	0	0	0
Number of FOG facilities inspected (external)	0	39	0	39	0
Percent of FOG producing facilities found to be in compliance	N/A	N/A	N/A	N/A	N/A
Number of SSOs due to capacity limitations or wet weather	0	0	0	0	0

KPI	2017	2018	2019	2020	2021
Total number of SSOs	5	1	7	3	2
Total volume of SSOs (gal)	305	9793	835	135	150
Total number of SSOs in main lines	2	1	1	0	0
Total number of SSOs in lower laterals	3	0	6	3	2
Number of repeat SSOs (same location as any previous SSO, regardless of year of occurrence)	0	0	0	0	0
Total number of SSOs within the Shore zone	0	0	0	0	0
Total volume of SSOs within the Shore zone	0	0	0	0	0
Number of pump station failures	0	1	0	0	0
Number of pipe failures/roots intrusion	3	0	5	3	1
Number of human caused pipe failures	0	0	0	0	0
Length of pipe CCTVd (miles)	17.8	17.3	14.7	16.3	17.5
Percentage of total overflow volume contained or returned to sewer	92%	10%	25%	0%	0%
Number of overflows due to FOG	1	0	0	0	0
Number of FOG facilities inspected (internal)	0	0	0	0	0
Number of FOG facilities inspected (external)	0	0	0	0	0
Percent of FOG producing facilities found to be in compliance	N/A	N/A	N/A	N/A	N/A
Number of SSOs due to capacity limitations or wet weather	0	0	0	0	0

KPI	2022	2023	2024	2025	2026
Total number of SSOs	1	0	1	0	NA
Total volume of SSOs (gal)	23	0	122,800	0	NA
Total number of SSOs in main lines	0	0	1	0	NA
Total number of SSOs in lower laterals	1	0	0	0	NA
Number of repeat SSOs (same location as any previous SSO, regardless of year of occurrence)	0	0	0	0	NA
Total number of SSOs within the Shore zone	0	0	1	0	NA
Total volume of SSOs within the Shore zone	0	0	85,000	0	NA
Number of pump station failures	0	0	0	0	NA
Number of pipe failures/roots intrusion	1	6	3	4	NA
Number of human caused pipe failures	0	0	0	0	NA
Length of pipe CCTVd (miles)	4.5	12	1.5	1.5	NA
Percentage of total overflow volume contained or returned to sewer	100%	NA	30%	NA	NA
Number of overflows due to FOG	0	0	0	0	NA
Number of FOG facilities inspected (internal)	3	0	1	0	NA
Number of FOG facilities inspected (external)	44	44	0	44	NA
Percent of FOG producing facilities found to be in compliance	N/A	N/A	N/A	N/A	NA
Number of SSOs due to capacity limitations or wet weather	0	0	0	0	NA

Appendix C – Program Audits (update per State Board schedule, every 3 years)

GENERAL DISTRICT INFORMATION

Item	General District Information Detail	Response
1.	Name of District	North Tahoe Public Utility District
2.	Date of Audit	October 27, 2025
3.	Name of Auditor	Joseph J Pomroy
4.	System Overview	Sewer collection, pumping and transmission
5.	Linear Feet of Gravity Sewer Mains	395,000
6.	Linear Feet of Force Mains	34,800
7.	Total Linear Feet of All District Sewer Lines	429,800
8.	Number of Pump Stations	20
9.	Linear Feet of Private Sewer Mains (excluding laterals)	0
10.	LF of Private Sewer Laterals	108,000
11.	Total Population Served by District	5,223 connections
12.	Current Average Monthly Single Family Residential Sewer Rate	\$70.91

GOALS

Item	Goals Detail	Response
13.	Are Goals Stated in the Risk-Based SSMP Still Appropriate and Accurate?	Yes
	<i>Yes. Goals in SSMP regarding District wide cleaning and CCTV inspection rotations in District's 2022 SSMP. These goals are modified time to time based on maintenance activities and observations of condition</i>	

ORGANIZATION

Item	Organization Detail	Response
14.	Reference Material: <ul style="list-style-type: none"> Organizational Chart Phone List (in Appendix A – Emergency Response Binder) 	
15.	Is the Risk-Based SSMP up-to-date with agency organization and staffing contact information?	Yes
	<i>Most Importantly, Contact information in Appendix A (Emergency Response Binder) is up to date. Updated continually as needed and distributed amongst all of Staff. As an appendix, this does not take Board action to update. Organizational Chart provided in Body (exhibit 2-1) is not up to date and will be updated in next SSMP update required in 2026. Update to Body of document requires NTPUD Board action and item is not significant enough to warrant this level of District involvement prior to required 2026 update.</i>	

LEGAL AUTHORITY

Item	Legal Authority Detail	Response
16.	Reference Material <ul style="list-style-type: none"> • Municipal code(s) • Enforcement action(s) 	
17.	Does the Risk-Based SSMP contain up-to-date information about the District's legal authority? <i>If NO, describe content and schedule for necessary changes, or provide additional comments for YES response.</i>	Yes
18.	Does District have sufficient legal authority to control sewer use and maintenance? <i>If NO, describe content and schedule for necessary changes, or provide additional comments for YES response.</i>	Yes

OPERATIONS AND MAINTENANCE

Item	Operations and Maintenance Detail	Response
19.	Reference Material <ul style="list-style-type: none"> • Collection system map – ESRI based 	
20.	Does the Risk-Based SSMP contain up-to-date information about the District's maps? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	Yes
21.	Are District's collection system maps complete, up-to-date and sufficiently detailed? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	Yes

RESOURCES AND BUDGET

Item	Resources and Budget Detail	Response
22.	Reference Material <ul style="list-style-type: none"> • Current Capital Improvement Plan (CIP) • Current operating budget 	
23.	Does Risk-Based SSMP contain up-to-date information about District's resources and budget? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	Yes
24.	Are District's resources and budget sufficient to support effective sewer system management? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	Yes
25.	Do District's planning efforts support long-term goals? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	Yes

PRIORITIZED PREVENTATIVE MAINTENANCE

Item	Prioritized Preventative Maintenance Detail	Response																								
26.	Reference Materials <ul style="list-style-type: none"> • Cleaning schedules • List or map of potential problem area • Work orders • Incident reports • Customer feedback • Annual Preventative Maintenance Activities 																									
27.	Annual Preventative Maintenance Activities Summary: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th rowspan="2">Maintenance Activities</th> <th colspan="4">Linear Feet/Year</th> </tr> <tr> <th>2022</th> <th>2023</th> <th>2024</th> <th>2025</th> </tr> </thead> <tbody> <tr> <td>CCTV</td> <td>95,551</td> <td>24,108</td> <td>16,266</td> <td>15,979</td> </tr> <tr> <td>Jet Rod – Hydro flush</td> <td>120,144</td> <td>93,287</td> <td>134,950</td> <td>75,018</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Maintenance Activities	Linear Feet/Year				2022	2023	2024	2025	CCTV	95,551	24,108	16,266	15,979	Jet Rod – Hydro flush	120,144	93,287	134,950	75,018						
Maintenance Activities	Linear Feet/Year																									
	2022	2023	2024	2025																						
CCTV	95,551	24,108	16,266	15,979																						
Jet Rod – Hydro flush	120,144	93,287	134,950	75,018																						
28.	Does Risk-Based SSMP contain up-to-date information about District’s preventative maintenance activities?	Yes																								
	<i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>																									

SCHEDULED INSPECTIONS AND CONDITION ASSESSMENT

Item	Scheduled Inspections and Condition Assessment Detail	Response
29.	Reference Material <ul style="list-style-type: none"> • Inspection reports • Infiltration and Inflow (I/I) monitoring studies and reports • Pipe and manhole condition data 	Tracked in District’s CMMS system
30.	Does Risk-Based SSMP contain up-to-date information about District’s inspection and condition assessment?	Yes
	<i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i> <i>All inspection information is in our CMMS System. This information is up to date and readily available.</i>	
31.	Are District’s scheduled inspections and condition assessment system effective in locating, identifying, and addressing deficiencies?	Yes
	<i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	

CONTINGENCY EQUIPMENT AND REPLACEMENT INVENTORIES

Item	Contingency Equipment and Replacement Inventories Detail	Response
32.	Reference Material <ul style="list-style-type: none"> Funds spent on equipment and materials Equipment and parts inventory 	
33.	Does the Risk-Based SSMP contain up-to-date information about equipment and replacement inventories? <i>If NO, describe content and schedule for necessary arrangements, or provide additional comments for YES response.</i>	Yes
34.	Are contingency equipment and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance? <i>If NO, describe content and schedule for necessary arrangements, or provide additional comments for YES response.</i>	Yes

TRAINING

Item	Training Detail	Response
35.	Reference Material <ul style="list-style-type: none"> Employee training records 	Maintained in database
36.	Does the Risk-Based SSMP contain up-to-date information about the District's training expectations and programs? <i>If NO, describe content and schedule for improvements, or provide additional comments for YES response.</i>	Yes
37.	Do supervisors believe that their staff is sufficiently trained? <i>If NO, describe content and schedule for improvements, or provide additional comments for YES response.</i>	Yes
38.	Are staff satisfied with the training opportunities and support offered to them? <i>If NO, describe content and schedule for improvements, or provide additional comments for YES response.</i>	Yes

OUTREACH TO BUILDING CONTRACTORS

Item	Outreach to Building Contractors Detail	Response												
39.	Reference Material <ul style="list-style-type: none"> Fliers/mailings Mailing lists 													
40.	<p><i>Summary of Number of Permits Issued to Plumbers or Contractors</i></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Number of Permits*</th> </tr> </thead> <tbody> <tr> <td>2022</td> <td>51 Plan Checks (note: the district does not issue permits)</td> </tr> <tr> <td>2023</td> <td>47 Plan Checks</td> </tr> <tr> <td>2024</td> <td>47 Plan Checks</td> </tr> <tr> <td>2025</td> <td>37 Plan Checks through October 24</td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table> <p>*Specifically permits that could impact District facilities</p>	Year	Number of Permits*	2022	51 Plan Checks (note: the district does not issue permits)	2023	47 Plan Checks	2024	47 Plan Checks	2025	37 Plan Checks through October 24			
Year	Number of Permits*													
2022	51 Plan Checks (note: the district does not issue permits)													
2023	47 Plan Checks													
2024	47 Plan Checks													
2025	37 Plan Checks through October 24													
41.	Does the Risk-Based SSMP contain up-to-date information about the District's outreach to plumbers and building contractors?	Yes												
42.	Has the District conducted or participated in any outreach activities to plumbers and building contractors?	Yes												

DESIGN AND CONSTRUCTION STANDARDS

Item	Design and Construction Standards Detail	Response
43.	Reference Material <ul style="list-style-type: none"> Design and construction standards Ordinances 	
44.	Does the Risk-Based SSMP contain up-to-date information about the District's design and construction standards?	Yes
	<i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	
45.	Are design and construction standards, as well as standards for inspection and testing of new and rehabilitated facilities sufficiently comprehensive and up-to-date?	Yes
	<i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	

OVERFLOW EMERGENCY RESPONSE PLAN

Item	Overflow Emergency Response Plan Detail	Response
46.	Reference Material <ul style="list-style-type: none"> Data submitted to CIWQS Service call data 	
47.	<p><i>Annual SSO Statistics Summary</i></p> <p>(See Key Performance Indicators – Appendix B) Update with SSMP in 2026</p>	

Item	Overflow Emergency Response Plan Detail	Response
48.	Does the Risk-Based SSMP contain an up-to-date version of the District's Overflow Emergency Response Plan?	Yes
	<i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below. The SSMP Appendix A provides the Emergency Overflow Response Plan. This plan is maintained as a separate binder issued to all Operations Employees.</i>	
49.	Considering the information in Item 47, is the Overflow Emergency Response Plan effective in handling SSOs?	Yes
	<i>If NO, describe content and schedule for necessary revisions and implementation, or provide additional comments for YES response in the space below.</i>	

FATS, OILS, AND GREASE (FOG) CONTROL PLAN

Item	Fats, Oils and Grease (FOG) Control Plan Detail	Response
50.	Reference Material <ul style="list-style-type: none"> List or map of FOG sources in service area List or map of potential problem areas Cleaning schedules Restaurant inspection reports or summaries Data submitted to CIWQS Service call data 	
51.	FOG Control Statistics (See Key Performance Indicators – Appendix B) Update with SSMP in 2026	
52.	Does the Risk-Based SSMP contain up-to-date information about the District's FOG program?	Yes
	<i>If NO, describe content and schedule for updates, or provide additional comments for YES response.</i>	
53.	Considering the information Item 51, is the FOG program effective in documenting and controlling FOG sources?	Yes
	<i>If NO, describe content and schedule for updates, or provide additional comments for YES response.</i>	

CAPACITY MANAGEMENT

Item	Capacity Management Detail	Response
54.	Reference Material <ul style="list-style-type: none"> Capacity assessment reports CIP SSO data 	
55.	Number of SSOs Caused by Hydraulic Limitations	
	Year	Number
	2021	0
	2022	0
	2023	0
	2024	0
2025	0	

56.	Does Risk-Based SSMP contain up-to-date information about District's capacity assessment?	Yes
	<i>If NO, describe content and schedule for necessary activities, or provide additional comments for YES response.</i>	
57.	Has District completed a capacity assessment and identified and addressed any hydraulic deficiencies in the system?	Yes
	<i>If NO, describe content and schedule for necessary activities, or provide additional comments for YES response.</i>	

MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

Item	Monitoring, Measurement and Program Modifications Detail	Response
58.	Does the Risk-Based SSMP contain up-to-date information about District's data collection and organization?	Yes
	<i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	
59.	Is District's data collection and organization sufficient to evaluate the effectiveness of the Risk-Based SSMP?	Yes
	<i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	

SSMP AUDITS

Item	SSMP Audits Detail	Response
60.	The Enrollee shall conduct an internal audit of its Sewer System Management Plan, and implementation of its Plan, at a minimum frequency of once every three years. The audit must be conducted for the period after the end of the Enrollee's last required audit period. Within six months after the end of the required 3-year audit period	Yes
	<i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	

COMMUNICATION PROGRAM

Item	Communication Program Detail	Response
61.	Reference Material <ul style="list-style-type: none"> • Mailings and mailing lists • Website • Other communication records such as newspaper ads, site postings, or other outreach • Customer feedback 	
62.	Does the Risk-Based SSMP contain up-to-date information about the District's public outreach activities? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	Yes
63.	Does the Risk-Based SSMP contain up-to-date information about the District's communications with satellite and tributary agencies? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	Yes
64.	Has the District effectively communicated with the public and other agencies about the Risk-Based SSMP, and addressed feedback? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	Yes

Appendix D – State Water Resources Control Board Order

**ORDER WQ 2022-0103-DWQ
STATEWIDE WASTE DISCHARGE REQUIREMENTS
GENERAL ORDER FOR SANITARY SEWER SYSTEMS**

STATE WATER RESOURCES CONTROL BOARD
1001 I Street, Sacramento, California 95814
ORDER WQ 2022-0103-DWQ

STATEWIDE WASTE DISCHARGE REQUIREMENTS
GENERAL ORDER FOR SANITARY SEWER SYSTEMS

This Order was adopted by the State Water Resources Control Board on December 6, 2022.

This Order shall become effective **180 days after the Adoption Date of this General Order**, on June 5, 2023.

The Enrollee shall comply with the requirements of this Order upon the Effective Date of this General Order.

This General Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, protect the Enrollee from liability under federal, state, or local laws, nor create a vested right for the Enrollee to continue the discharge of waste.

CERTIFICATION

I, Jeanine Townsend, Clerk to the Board, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the State Water Board on December 6, 2022.

AYE: Chair E. Joaquin Esquivel
Vice Chair Dorene D'Adamo
Board Member Sean Maguire
Board Member Laurel Firestone
Board Member Nichole Morgan

NAY: None

ABSENT: None

ABSTAIN: None

 for
Jeanine Townsend
Clerk to the Board

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1. INTRODUCTION

This General Order regulates sanitary sewer systems designed to convey sewage. For the purpose of this Order, a sanitary sewer system includes, but is not limited to, pipes, valves, pump stations, manholes, siphons, wet wells, diversion structures and/or other pertinent infrastructure, upstream of a wastewater treatment plant headworks. A sanitary sewer system includes:

- Laterals owned and/or operated by the Enrollee;
- Satellite sewer systems; and/or
- Temporary conveyance and storage facilities, including but not limited to temporary piping, vaults, construction trenches, wet wells, impoundments, tanks and diversion structures.

Sewage is untreated or partially treated domestic, municipal, commercial and/or industrial waste (including sewage sludge), and any mixture of these wastes with inflow or infiltration of stormwater or groundwater, conveyed in a sanitary sewer system. Sewage contains high levels of suspended solids, non-digested organic waste, pathogenic bacteria, viruses, toxic pollutants, nutrients, oxygen-demanding organic compounds, oils, grease, pharmaceuticals, and other harmful pollutants.

For the purpose of this General Order, a spill is a discharge of sewage from any portion of a sanitary sewer system due to a sanitary sewer system overflow, operational failure, and/or infrastructure failure. Sewage and its associated wastewater spilled from a sanitary sewer system may threaten public health, beneficial uses of waters of the State, and the environment.

This General Order serves as statewide waste discharge requirements and supersedes the previous State Water Resources Control Board (State Water Board) Order 2006-0003-DWQ and amendments thereafter. All sections and attachments of this General Order are enforceable by the State Water Board and Regional Water Quality Control Boards (Regional Water Boards). Through this General Order, the State Water Board requires an Enrollee to:

- Comply with federal and state prohibitions of discharge of sewage to waters of the State, including federal waters of the United States;
- Comply with specifications, and notification, monitoring, reporting and recordkeeping requirements in this General Order that implement the federal Clean Water Act, the California Water Code (Water Code), water quality control plans (including Regional Water Board Basin Plans) and policies;
- Proactively operate and maintain resilient sanitary sewer systems to prevent spills;
- Eliminate discharges of sewage to waters of the State through effective implementation of a Sewer System Management Plan;
- Monitor, track, and analyze spills for ongoing system-specific performance improvements; and
- Report noncompliance with this General Order per reporting requirements.

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An Enrollee is a public, private, or other non-governmental entity that has obtained approval for regulatory coverage under this General Order, including:

- A state agency, municipality, special district, or other public entity that owns and/or operates one or more sanitary sewer systems:
 - greater than one (1) mile in length (each individual sanitary sewer system);
 - one (1) mile or less in length where the State Water Board or a Regional Water Board requires regulatory coverage under this Order; or
- A federal agency, private company, or other non-governmental entity that owns and/or operates a sanitary sewer system of any size where the State Water Board or a Regional Water Board requires regulatory coverage under this Order in response to a history of spills, proximity to surface water, or other factors supporting regulatory coverage.

For the purpose of this Order, a sanitary sewer system includes only systems owned and/or operated by the Enrollee.

2. REGULATORY COVERAGE AND APPLICATION REQUIREMENTS

2.1. Requirements for Continuation of Existing Regulatory Coverage

To continue regulatory coverage from previous Order 2006-0003-DWQ under this General Order, **within the 60-days-prior-to the Effective Date of this General Order**, the Legally Responsible Official of an existing Enrollee shall electronically certify the Continuation of Existing Regulatory Coverage form in the online California Integrated Water Quality System (CIWQS) Sanitary Sewer System Database. The Legally Responsible Official will receive an automated CIWQS-issued Notice of Applicability email, confirming continuation of regulatory coverage under this General Order. All regulatory coverage under previous Order 2006-0003-DWQ will cease on the Effective Date of this Order.

An Enrollee continuing existing regulatory coverage is not required to submit a new application package or pay an application fee for enrollment under this General Order. The annual fee due date for continued regulatory coverage from previous Order 2006-0003-DWQ to this General Order remains unchanged.

A previous Enrollee of Order 2006-0003-DWQ that fails to certify the Continuation of Existing Regulatory Coverage form in the online CIWQS database by the Effective Date of this Order is considered a New Applicant, and will not have regulatory coverage for its sanitary sewer system(s) until:

- A new application package for system(s) enrollment is submitted per section 2.2 (Requirements for New Regulatory Coverage) below; and
- The new application package is approved per section 2.2.2 (Approval of Application Package (For New Applicants Only)).

2.2. Requirements for New Regulatory Coverage

No later than 60 days prior to commencing and/or assuming operation and maintenance responsibilities of a sanitary sewer system, a duly authorized representative that

maintains legal authority over the public or private sanitary sewer system is required to enroll under this General Order by submitting a complete application package as specified below and as provided in Attachment B (Application for Enrollment Form) of this General Order.

Unless required by a Regional Water Board, a public agency that owns a combined sewer system subject to the Combined Sewer Overflow Control Policy (33 U.S. Code § 1342(q)), is not required to enroll, under this Order, the portions of its sanitary sewer system(s) that collects combined sanitary wastewater and stormwater.

2.2.1. Application Package Requirements

The Application for Enrollment package for new applicants must include the following items:

- **Application for Enrollment Form.** The form in Attachment B of this General Order must be completed, signed, and certified by a Legally Responsible Official, in accordance with section 5.1 (Designation of a Legally Responsible Official) of this General Order. If an electronic Application for Enrollment form is available at the time of application, a new applicant shall submit its application form electronically; and
- **Application Fee.** A fee payable to the “State Water Resources Control Board” in accordance with the Fee Schedule in the California Code of Regulations, Title 23, section 2200, or subsequent fee regulations updates.

The application fee for this General Order is based on the sanitary sewer system’s threat to water quality and complexity designations of category 2C or 3C, which is assigned based on the population served by the system. The current Fee Schedule for sanitary sewer systems is listed under subdivision (a)(2) at the following website: [Fee Schedule](https://www.waterboards.ca.gov/resources/fees/water_quality/) (https://www.waterboards.ca.gov/resources/fees/water_quality/).

2.2.2. Approval of Application Package (For New Applicants Only)

The Deputy Director of the State Water Board, Division of Water Quality (Deputy Director) will consider approval of each complete Application for Enrollment package. The Deputy Director will issue a Notice of Applicability letter which serves as approved regulatory coverage for the new Enrollee.

If the submitted application package is not complete in accordance with section 2.2.1 (Application Package Requirements) of this General Order, the Deputy Director will send a response letter to the applicant outlining the application deficiencies. The applicant will have 60 days from the date of the response letter to correct the application deficiencies and submit the identified items necessary to complete the application package to the State Water Board.

2.2.3. Electronic Reporting Account for New Enrollee

Within 30 days after the date of the Approval of Complete Application Package for System Enrollment, a duly authorized representative for the Enrollee shall obtain a CIWQS Sanitary Sewer System Database user account by clicking the “User Registration” button and following the directions on the [CIWQS Login Page](#)

(<https://ciwqs.waterboards.ca.gov>). If additional assistance is needed to establish an online CIWQS user account, contact State Water Board staff by email at CIWQS@waterboards.ca.gov. The online user account will provide the Enrollee secure access to the online CIWQS database for electronic reporting.

2.3. Regulatory Coverage Transfer

Regulatory coverage under this General Order is not transferable to any person or party except after an existing Enrollee submits a written request for a regulatory coverage transfer to the Deputy Director, at least 60 days in advance of any proposed system ownership transfer. The written request must include a written agreement between the existing Enrollee and the new Enrollee containing:

- Acknowledgement that the transfer of ownership is solely of an existing system with an existing waste discharge identification (WDID) number;
- The specific ownership transfer date in which the responsibility and regulatory coverage transfer between the existing Enrollee and the new Enrollee becomes effective; and
- Acknowledgement that the existing Enrollee is liable for violations occurring up to the ownership transfer date and that the new Enrollee is liable for violations occurring on and after the ownership transfer date.

The Deputy Director will consider approval of the written request. If approved, the Deputy Director will issue a Notice of Applicability letter which serves as an approved transfer of regulatory coverage to the new Enrollee.

3. FINDINGS

3.1. Legal Authorities

3.1.1. Federal and State Regulatory Authority

The objective of the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the waters of the United States (33 U.S.C. 1251). The Water Code authorizes the State Water Board to implement the Clean Water Act in the State and to protect the quality of all waters of the State (Water Code sections 13000 and 13160).

3.1.2. Discharge of Sewage

A discharge of untreated or partially treated sewage is a discharge of waste as defined in Water Code section 13050(d) that could affect the quality of waters of the State and is subject to regulation by waste discharge requirements issued pursuant to Water Code section 13263 and Chapter 9, Division 3, Title 23 of the California Code of Regulations. A discharge of sewage may pollute and alter the quality of the waters of the State to a degree that unreasonably affects the beneficial uses of the receiving water body or facilities that serve those beneficial uses (Water Code section 13050(l)(1)).

3.1.3 Water Boards Authority to Require Technical Reports, Monitoring, and Reporting

Water Code sections 13267 and 13383 authorize the Regional Water Boards and the State Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. Water Code section 13267(b), authorizes the Regional Water Boards to “require any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region... or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of water within its region shall furnish, under penalty of perjury, technical or monitoring reports which the regional board requires...In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports.” Water Code section 13267(f) authorizes the State Water Board to require this information if it consults with the Regional Water Boards and determines that it will not duplicate the efforts of the Regional Water Boards. The State Water Board has consulted with the Regional Water Boards and made this determination.

The technical and monitoring reports required by this General Order and Attachment E (Notification, Monitoring, Reporting and Recordkeeping Requirements) are necessary to evaluate and ensure compliance with this General Order. The effort to develop required technical reports will vary depending on the system size and complexity and the needs of the specific technical report. The burden and cost of these reports are reasonable and consistent with the interest of the state in protecting water quality, which is the primary purpose of requiring the reports.

Water Code section 13383(a) authorizes the Water Boards to “establish monitoring, inspection, entry, reporting, and recordkeeping requirements... for any person who discharges, or proposes to discharge, to navigable waters, any person who introduces pollutants into a publicly owned treatment works, any person who owns or operates, or proposes to own or operate, a publicly owned treatment works or other treatment works treating domestic sewage, or any person who uses or disposes, or proposes to use or dispose, of sewage sludge.” Section 13383(b) continues, “the state board or the regional boards may require any person subject to this section to establish and maintain monitoring equipment or methods, including, where appropriate, biological monitoring methods, sample effluent as prescribed, and provide other information as may be reasonably required.”

Reporting of spills from privately owned sewer laterals and systems pursuant to section 5.15 (Voluntary Reporting of Spills from Privately-Owned Sewer Laterals and/or Private Sanitary Sewer Systems) of this General Order is authorized by Water Code section 13225(c) and encouraged by the State Water Board, wherein a local agency may investigate and report on any technical factors involved in water quality control provided the burden including costs of such reports bears a reasonable relationship to the need for the report and the benefits to be obtained therefrom. The burden of reporting private spills under section 5.15 (Voluntary Reporting of Spills from Privately-Owned Sewer Laterals and/or Private Sanitary Sewer Systems) is minimal and is outweighed by the benefit of providing Regional Water Boards an opportunity to respond to these spills

when an Enrollee, which in many cases has a contractual relationship with the owner of the private system, has knowledge of the spills.

3.1.4. Water Board Authority to Prescribe General Waste Discharge Requirements

Water Code section 13263(i) provides that the State Water Board may prescribe general waste discharge requirements for a category of discharges if the State Water Board finds or determines that:

- The discharges are produced by the same or similar operations;
- The discharges involve the same or similar types of waste;
- The discharges require the same or similar treatment standards; and
- The discharges are more appropriately regulated under general waste discharge requirements than individual waste discharge requirements.

Since 2006, the State Water Board has been regulating over 1,100 publicly owned sanitary sewer systems (See section 3.1.5 (Previous Statewide General Waste Discharge Requirements) of this General Order). California also has a large unknown number of unregulated privately owned sanitary sewer systems. All waste conveyed in publicly owned and privately owned sanitary sewer systems (as defined in this General Order) is comprised of untreated or partially treated domestic waste and/or industrial waste. Generally, sanitary sewer systems are designed and operated to convey waste by gravity or under pressure; system-specific design elements and system-specific operations do not change the common nature of the waste, the common threat to public health, or the common impacts on water quality. Spills of waste from a sanitary sewer system prior to reaching the ultimate downstream treatment facility are unauthorized and enforceable by the State Water Board and/or a Regional Water Board. Therefore, spills from sanitary sewer systems are more appropriately regulated under general waste discharge requirements.

As specified in Water Code sections 13263(a) and 13241, the implementation of requirements set forth in this Order is for the reasonable protection of past, present, and probable future beneficial uses of water and the prevention of nuisance. The requirements implement the water quality control plans (Basin Plans) for each Regional Water Board and take into account the environmental characteristics of sewer service areas and hydrographic units within the state. Additionally, the State Water Board has considered water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect water quality, costs associated with compliance with these requirements, the need for developing housing within California, and the need to protect sources of drinking water and other water supplies.

3.1.5. Previous Statewide General Waste Discharge Requirements

On May 2, 2006, the State Water Board adopted Order 2006-0003-DWQ serving as Waste Discharge Requirements pursuant to Article 4, Chapter 4, Division 7 of the Water Code (commencing with section 13260) for inadvertent discharges to waters of the State. Order 2006-0003-DWQ prohibited discharges of untreated or partially treated sewage. Order 2006-0003-DWQ also required system-specific management, operation, and maintenance of publicly owned sewer systems greater than one mile in length.

To decrease the impacts on human health and the environment caused by sewage spills, the previous Order required enrollees to develop a rehabilitation and replacement plan that identifies system deficiencies and prioritizes short-term and long-term rehabilitation actions. The previous Order also required enrollees to:

1. Maintain information that can be used to establish and prioritize appropriate Sewer System Management Plan activities; and
2. Implement a proactive approach to reduce spills.

The previous Order required Sewer System Management Plan elements for “the proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management.”

On July 30, 2013, the State Water Board amended General Order 2006-0003-DWQ with Order WQ 2013-0058-EXEC, Amending Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.

Many enrollees of Order 2006-0003-DWQ have already implemented proactive measures to reduce sewage spills. Other enrollees, however, still need technical assistance and funding to improve sanitary sewer system operation and maintenance for the reduction of sewage spills.

3.1.6. Existing Memorandum of Agreement with California Water Environment Association

The California Water Environment Association is a nonprofit organization dedicated to providing water industry certifications, training, and networking opportunities. The Association’s Technical Certification Program provides accredited sanitary sewer system operator certification for collection system operators and maintenance workers.

On February 10, 2016, the State Water Board entered into a collaborative agreement with the Association titled *Memorandum of Agreement Between the California State Water Resources Control Board and the California Water Environment Association - Training Regarding Requirements Set Forth in Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*. The Memorandum sets forth collaborative training necessary for regulated sanitary sewer system personnel to operate and maintain a well operating system and ensure full compliance with statewide sewer system regulations.

On March 15, 2018, the State Water Board and the California Water Environment Association amended the existing Memorandum of Agreement to include collaborative outreach and expand training needs associated with further updates to Water Board regulations for sanitary sewer systems. The State Water Board encourages further Agreement updates as necessary to support improved sewer system operations and the professionalism of collection system operators.

3.2. General

3.2.1. Waters of the State

Waters of the State include any surface water or groundwater, including saline waters, within the boundaries of the state as defined in Water Code section 13050(e), and are inclusive of waters of the United States.

3.2.2. Sanitary Sewer System Spill Threats to Public Health and Beneficial Uses

Sewage contains high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen-demanding organic compounds, oil and grease and other pollutants. Sewage spills may cause a public nuisance, particularly when sewage is discharged to areas with high public exposure such as streets and surface waters used for drinking, irrigation, fishing, recreation, or other public consumption or contact uses.

More specifically, sanitary sewer spills may:

- Adversely affect aquatic life and/or threaten water quality when reaching receiving waters;
- Inadvertently release trash, including plastics;
- Impair the recreational use and aesthetic enjoyment of surface waters by polluting surface water or groundwater;
- Threaten public health through direct public exposure to bacteria, viruses, intestinal parasites, and other microorganisms that can cause serious illness such as gastroenteritis, hepatitis, cryptosporidiosis, and giardiasis;
- Negatively impact ecological receptors and biota within surface waters; and
- Cause nuisance including odors, closure of beaches and recreational areas, and property damage.

Sanitary sewer system spills may pollute receiving waters and threaten beneficial uses of surface water and groundwater. Potentially threatened beneficial uses include, but are not limited to the following (with associated acronym representations as included in statewide water quality control plans and Regional Water Boards' Basin Plans):

- Municipal and Domestic Supply (MUN)
- Water Contact Recreation (REC-1) and Non-Contact Water Recreation (REC-2)
- Cold Freshwater Habitat (COLD)
- Warm Freshwater Habitat (WARM)
- Native American Culture (CUL)
- Wildlife Habitat (WILD)
- Rare, Threatened, or Endangered Species (RARE)
- Spawning, Reproduction, and/or Early Development (SPWN)
- Wetland Habitat (WET)
- Agricultural Supply (AGR)
- Estuarine Habitat (EST)

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- Commercial and Sport Fishing (COMM)
- Subsistence Fishing (SUB)
- Tribal Tradition and Culture (CUL)
- Tribal Subsistence Fishing (T-SUB)
- Aquaculture (AQUA)
- Marine Habitat (MAR)
- Preservation of Biological Habitats of Special Significance (BIOL)
- Migration of Aquatic Organisms (MIGR)
- Shellfish Harvesting (SHELL)
- Industrial Process Supply (PROC)
- Industrial Service Supply (IND)
- Hydropower Generation (POW)
- Navigation (NAV)
- Flood Peak Attenuation/Flood Water Storage (FLD)
- Water Quality Enhancement (WQE)
- Fresh Water Replenishment (FRSH)
- Groundwater Recharge (GWR)
- Inland Saline Water Habitat (SAL)

3.2.3. Proactive Sanitary Sewer System Management to Eliminate Spill Causes

Finding 3 of the previous Order, 2006-0003-DWQ, states: “Sanitary sewer systems experience periodic failures resulting in discharges that may affect waters of the state. There are many factors (including factors related to geology, design, construction methods and materials, age of the system, population growth, and system operation and maintenance), which affect the likelihood of an SSO [sanitary sewer overflow]. A proactive approach that requires Enrollees to ensure a system-wide operation, maintenance, and management plan is in place will reduce the number and frequency of SSOs within the state. This approach will in turn decrease the risk to human health and the environment caused by SSOs.”

Many spills are preventable through proactive attention on sanitary sewer system management using the best practices and technologies available to address major causes of spills, including but not limited to:

- Blockages from sources including but not limited to:
 - Fats, oils and grease;
 - Tree roots;
 - Rags, wipes and other paper, cloth and plastic products; and
 - Sediment and debris.
- Sewer system damage and exceedance of sewer system hydraulic capacity from identified system-specific environmental, and climate-change impacts, including but not limited to:

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- Sea level rise impacts including flooding, coastal erosion, seawater intrusion, tidal inundation and submerged lands;
- Increased surface water flows due to higher intensity rain events;
- Flooding;
- Wildfires and wildfire induced impacts;
- Earthquake induced damage;
- Landslides; and
- Subsidence.
- Infrastructure deficiencies and failures, including but not limited to:
 - Pump station mechanical failures;
 - System age;
 - Construction material failures;
 - Manhole cover failures;
 - Structural failures; and
 - Lack of proper operation and maintenance.
- Insufficient system capacity (temporary or sustained), due to factors including but not limited to:
 - Excessive and/or increased storm or groundwater inflow/infiltration;
 - Insufficient capacity due to population increase and/or new connections from industrial, commercial and other system users; and
 - Stormwater capture projects utilizing a sanitary sewer system to convey stormwater to treatment facilities for reuse.
- Community impacts, including but not limited to:
 - Power outages;
 - Vandalism; and
 - Contractor-caused or other third party-caused damages.

3.2.4. Underground Sanitary Sewer System Leakage

Portions of some sanitary sewer systems may leak, causing underground exfiltration (exiting) of sewage from the system. Exfiltrated sewage that remains in the underground infrastructure trench and/or the soil matrix, and that does not discharge into waters of the State (surface water or groundwater) may not threaten beneficial uses.

Underground exfiltrated sewage may threaten beneficial uses if discharged to waters of the State. Exfiltrated sewage that discharges to groundwater may impact beneficial uses of groundwater and pollute groundwater supply. Additionally, if in close proximity, exfiltrated sewage may enter into a compromised underground drainage conveyance system that discharges into a water of the United States, or into groundwater that is hydrologically connected to (feeds into) a water of the United States, thus potentially causing: (1) a Clean Water Act violation, (2) threat and impact to beneficial uses, and/or (3) surface water pollution.

3.2.5. Proactive Sanitary Sewer System Management to Reduce Inflow and Infiltration

Excessive inflow (stormwater entering) and infiltration (groundwater seepage entering) to sanitary sewer systems is preventable through proactive sewer system management using the best practices and technologies available. The efficiency of the downstream wastewater treatment processes is dependent on the performance of the sanitary sewer system. When the structural integrity of a sanitary sewer system deteriorates, high volumes of inflow and infiltration can enter the sewer system. High levels of inflow and infiltration increase the hydraulic load on the downstream treatment plant, which can reduce treatment efficiency, lead to bypassing a portion of the treatment process, cause illegal discharge of partially treated effluent, or in extreme situations make biological treatment facilities inoperable (e.g., wash out the biological organisms that treat the waste).

3.3. Water Quality Control Plans, Policies and Resolutions

The nine Regional Water Boards have adopted region-specific water quality control plans (commonly referred to as Basin Plans) that designate beneficial uses, establish water quality objectives, and contain implementation programs and policies to achieve those objectives. The State Water Board has adopted statewide water quality control plans, policies and resolutions establishing statewide water quality objectives, implementation programs and initiatives.

3.3.1. State Water Board Antidegradation Policy

On October 28, 1968, the State Water Board adopted Resolution 68-16, titled Statement of Policy with Respect to Maintaining High Quality of Waters in California, which incorporates the federal antidegradation policy. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings.

The continued prohibition of sewage discharges from sanitary sewer systems into waters of the State aligns with Resolution 68-16. A sewage discharge from sanitary sewers to waters of the State is prohibited by this Order. Therefore, this Order does not allow degradation of waters of the State. In addition, this Order: (1) further expands the existing prohibition of sewage discharges to include waters of the State, in addition to waters of the United States as provided in previous Order 2006-0003-DWQ, and (2) enhances the ability for Water Board enforcement of violations of the established prohibitions.

3.3.2. State Water Board Sources of Drinking Water Policy

On May 19, 1988, the State Water Board adopted Resolution 88-63 (amended on February 1, 2006), titled Sources of Drinking Water, establishing state policy that all waters of the State, with certain exceptions, are suitable or potentially suitable for municipal or domestic supply.

3.3.3. State Water Board Cost of Compliance Resolution

On September 24, 2013, the State Water Board adopted Resolution 2013-0029, titled Directing Actions in Response to Efforts by Stakeholders on Reducing Costs of

Compliance While Maintaining Water Quality Protection. Through this resolution, the State Water Board committed to continued stakeholder engagement in identifying and implementing measures to reduce costs of compliance with regulatory orders while maintaining water quality protection and improving regulatory program outcomes.

3.3.4. State Water Board Human Right to Water Resolution

On February 16, 2016, the State Water Board adopted Resolution 2016-0010, titled Adopting the Human Right to Water as a Core Value and Directing its Implementation in Water Board Programs and Activities, addressing the human right to water as a core value and directing Water Board programs to implement requirements to support safe drinking water for all Californians.

On November 16, 2021, the State Water Board adopted Resolution 2021-0050 titled Condemning Racism, Xenophobia, Bigotry, and Racial Injustice, and Strengthening Commitment to Racial Equity, Diversity, Inclusion, Access, and Anti-racism. Among other actions, through Resolution 2021-0050, the State Water Board, in summary as corresponding to this General Order, reaffirms its commitment to its Human Right to Water resolution, upholding that every human being in California deserves safe, clean, affordable, and accessible water for human consumption, cooking, and sanitation purposes. Resolution 2021-0050 provides the State Water Board commitment to:

- Protect public health and beneficial uses of waterbodies in all communities, including communities disproportionately burdened by wastes discharge of waste to land and surface water;
- Restore impaired surface waterbodies and degraded aquifers; and
- Promote multi-benefit water quality projects.

Through Resolution 2021-0050, the State Water Board also commits to expanding implementation of its Climate Change Resolution to address the disproportionate effects of extreme hydrologic conditions and sea-level rise on Black, Indigenous, and people of color communities, prioritizing:

- The right to safe, clean, affordable, and accessible drinking water and sanitation;
- Sustainable management and protection of local groundwater resources;
- Healthy watersheds; and
- Access to surface waterbodies that support subsistence fishing.

On June 7, 2022, the State Water Board adopted a Resolution, titled Authorizing the Executive Director or Designee to Enter into One or More Multi-Year Contracts Up to a Combined Sum of \$4,000,000 for a Statewide Wastewater Needs Assessment, supporting the equitable access to sanitation for all Californians and implementation of Resolutions 2016-0010 and 2021-0050.

This General Order supports the State Water Board priority in collecting a comprehensive set of data for California's wastewater systems, including sanitary sewer systems. Data reported per the requirements of this Order will be used with data from other Water Boards' programs, to further develop criteria and create a statewide risk

framework to prioritize critical funding and infrastructure investments for California's most vulnerable populations, including disadvantaged or severely disadvantaged communities with inadequate or failing sanitation systems and threatened access to healthy drinking water supplies.

3.3.5. State Water Board Open Data Resolution

On July 10, 2018, the State Water Board adopted Resolution 2018-0032, titled Adopting Principles of Open Data as a Core Value and Directing Programs and Activities to Implement Strategic Actions to Improve Data Accessibility and Associated Innovation, directing regulatory programs to assure all monitoring and reporting requirements support the State Water Boards' Open Data Initiative.

3.3.6. State Water Board Response to Climate Change

On March 7, 2017, the State Water Board adopted Resolution 2017-0012, titled Comprehensive Response to Climate Change, requiring a proactive response to climate change in all California Water Board actions, with the intent to embed climate change consideration into all programs and activities.

3.4. California Environmental Quality Act

The adoption of this Order is an action to reissue general waste discharge requirements that is exempt from the California Environmental Quality Act (Public Resources Code section 21000 et seq.) because it is an action taken by a regulatory agency to assure the protection of the environment and the regulatory process involves procedures for protection of the environment (Cal. Code Regs., Title 14, section 15308). In addition, the action to adopt this Order is exempt from CEQA pursuant to Cal. Code Regs., Title 14, section 15301, to the extent that it applies to existing sanitary sewer collection systems that constitute "existing facilities" as that term is used in sections 15301 and 15302, to the extent that it results in the repair or replacement of existing systems involving negligible or no expansion of capacity.

3.5. State Water Board Funding Assistance for Compliance with Water Board Water Quality Orders

The State Water Board, Division of Financial Assistance administers the implementation of the State Water Board financial assistance programs, per Board-adopted funding policies. Among other funding areas, the Division administers loan and grant funding for the planning and construction of wastewater and water recycling facilities per funding program-specific policies and guidelines. Applicants may apply for Clean Water State Revolving Fund low-interest loan, Small Community Wastewater grant funding assistance, and other funding available at the time of application, for some of the costs associated with complying with this General Order.

Funding applicants may obtain further information regarding current funding opportunities, and Division of Financial Assistance staff contact information at the following website: [Financial Assistance Funding - Grants and Loans | California State Water Resources Control Board](https://www.waterboards.ca.gov/water_issues/programs/grants_loans/).

(https://www.waterboards.ca.gov/water_issues/programs/grants_loans/)

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Section 13477.6 of the Water Code authorizes the Small Community Grant Fund. The Small Community Grant Fund allows the State Water Board to provide grant funding assistance to small, disadvantaged communities and small severely disadvantaged communities that may not otherwise be able to afford a loan or similar financing for projects to comply with requirements of this General Order. The State Water Board also considers loan forgiveness on a disadvantaged community-specific basis.

For disadvantaged communities' wastewater needs, the State Water Board places priority on the funding of projects that address:

- Public health;
- Violations of waste discharge requirements and National Pollutant Discharge Elimination System (NPDES) permits;
- Providing sewer system service to existing septic tank owners; and
- High priority public health and water quality concerns identified by a Regional Water Board.

3.6. Notification to Interested Parties

On January 31, 2022, the State Water Board notified interested parties and persons of its intent to reissue Sanitary Sewer Systems General Order 2006-0003-DWQ by issuing a draft General Order for a 60-day public comment period. State Water Board staff conducted extensive stakeholder outreach and encouraged public participation in the adoption process for this General Order. On March 15, 2022, the State Water Board held a public meeting to hear and consider oral public comments. The State Water Board considered all public comments prior to adopting this General Order.

THEREFORE, IT IS HEREBY ORDERED, that pursuant to Water Code sections 13263, 13267, and 13383 this General Order supersedes Order 2006-0003-DWQ, Order WQ 2013-0058-EXEC, and any amendments made to these Orders thereafter, except for enforcement purposes and to meet the provisions contained in Division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, the Enrollee shall comply with the requirements in this Order.

4. PROHIBITIONS

4.1 Discharge of Sewage from a Sanitary Sewer System

Any discharge from a sanitary sewer system that has the potential to discharge to surface waters of the State is prohibited unless it is promptly cleaned up and reported as required in this General Order.

4.2 Discharge of Sewage to Waters of the State

Any discharge from a sanitary sewer system, discharged directly or indirectly through a drainage conveyance system or other route, to waters of the State is prohibited.

4.3. Discharge of Sewage Creating a Nuisance

Any discharge from a sanitary sewer system that creates a nuisance or condition of pollution as defined in Water Code section 13050(m) is prohibited.

5. SPECIFICATIONS

5.1. Designation of a Legally Responsible Official

The Enrollee shall designate a Legally Responsible Official that has authority to ensure the enrolled sanitary sewer system(s) complies with this Order, and is authorized to serve as a duly authorized representative. The Legally Responsible Official must have responsibility over management of the Enrollee’s entire sanitary sewer system, and must be authorized to make managerial decisions that govern the operation of the sanitary sewer system, including having the explicit or implicit duty of making major capital improvement recommendations to ensure long-term environmental compliance. The Legally Responsible Official must have or have direct authority over individuals that:

- Possess a recognized degree or certificate related to operations and maintenance of sanitary sewer systems, and/or
- Have professional training and experience related to the management of sanitary sewer systems, demonstrated through extensive knowledge, training and experience.

For example, a sewer system superintendent or manager, an operations manager, a public utilities manager or director, or a district engineer may be designated as a Legally Responsible Official.

The Legally Responsible Official shall complete the electronic [CIWQS “User Registration” form](https://ciwqs.waterboards.ca.gov/ciwqs/newUser.jsp) (<https://ciwqs.waterboards.ca.gov/ciwqs/newUser.jsp>). A Legally Responsible Official that represents multiple enrolled systems shall complete the electronic CIWQS “User Registration” form for each system.

The Enrollee shall submit any change to its Legally Responsible Official, and/or change in contact information, to the State Water Board within 30 calendar days of the change by emailing ciwqs@waterboards.ca.gov and copying the appropriate Regional Water Board as provided in Attachment F (Regional Water Quality Control Board Contact Information) of this General Order.

5.2. Sewer System Management Plan Development and Implementation

To facilitate adequate local funding and management of its sanitary sewer system(s), the Enrollee shall develop and implement an updated Sewer System Management Plan. The scale and complexity of the Sewer System Management Plan, and specific elements of the Plan, must match the size, scale and complexity of the Enrollee’s sanitary sewer system(s). The Sewer System Management Plan must address, at minimum, the required Plan elements in Attachment D (Sewer System Management Plan – Required Elements) of this General Order. To be effective, the Sewer System Management Plan must include procedures for the management, operation, and maintenance of the sanitary sewer system(s). The procedures must: (1) incorporate the

prioritization of system repairs and maintenance to proactively prevent spills, and (2) address the implementation of current standard industry practices through available equipment, technologies, and strategies.

For an existing Enrollee under Order 2006-0003-DWQ that has certified its Continuation of Existing Regulatory Coverage, per section 2.1 (Requirements for Continuation of Existing Regulatory Coverage) of this General Order:

Within six (6) months of the Adoption Date of this General Order:

- The Legally Responsible Official shall upload the Enrollee's existing Sewer System Management Plan to the online CIWQS Sanitary Sewer System Database.

For a new Enrollee:

Within twelve (12) months of the Application for Enrollment approval date:

- The governing entity of the new Enrollee shall approve its Sewer System Management Plan; and
- The Legally Responsible Official shall certify and upload its Sewer System Management Plan to the online CIWQS Sanitary Sewer System Database.

5.3. Certification of Sewer System Management Plan and Plan Updates

The Legally Responsible Official shall certify and upload its Sewer System Management Plan and all subsequent updates to the online CIWQS Sanitary Sewer System Database.

5.4. Sewer System Management Plan Audits

The Enrollee shall conduct an internal audit of its Sewer System Management Plan, and implementation of its Plan, at a minimum frequency of once every three years. The audit must be conducted for the period after the end of the Enrollee's last required audit period. **Within six months after the end of the required 3-year audit period**, the Legally Responsible Official shall submit an audit report into the online CIWQS Sanitary Sewer System Database per the requirements in section 3.10 (Sewer System Management Plan Audit Reporting Requirements) of Attachment E1 of this General Order.

Audit reports submitted to the CIWQS Sanitary Sewer System Database will be viewable only to Water Boards staff.

The internal audit shall be appropriately scaled to the size of the system(s) and the number of spills. The Enrollee's sewer system operators must be involved in completing the audit. At minimum, the audit must:

- Evaluate the implementation and effectiveness of the Enrollee's Sewer System Management Plan in preventing spills;
- Evaluate the Enrollee's compliance with this General Order;
- Identify Sewer System Management Plan deficiencies in addressing ongoing spills and discharges to waters of the State; and

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- Identify necessary modifications to the Sewer System Management Plan to correct deficiencies.

The Enrollee shall submit a complete audit report that includes:

- Audit findings and recommended corrective actions;
- A statement that sewer system operators’ input on the audit findings has been considered; and
- A proposed schedule for the Enrollee to address the identified deficiencies.

A new Enrollee of this General Order (that did not have a sanitary sewer system enrolled in the previous State Water Board Order 2006-0003-DWQ) shall conduct its first internal Sewer System Management Plan audit for the time period between the date of submittal of its certified Sewer System Management Plan and the third subsequent December 31st date. The audit report must be submitted into the online CIWQS Sanitary Sewer System Database **by July 1 of the following calendar year.**

See the following tables for clarification:

Initial Audit Period and Audit Due Date for New Enrollees

	Audit Period	Audit Due Date
New Enrollee	Certified Sewer System Management Plan Submittal Date through the third subsequent December 31 st date	July 1 st date after audit period
<i>Example</i>	<i>Certified Sewer System Management Plan Submittal Date of August 2, 2025 Audit Period of August 2, 2025 through December 31, 2027</i>	<i>July 1, 2028</i>

Initial Audit Period for Transition from 2-Year Audit Required in Previous Order 2006-0003-DWQ to 3-Year Audit Required in this General Order

	Audit Period	Audit Due Date
An Enrollee previously regulated by Order 2006-003-DWQ	A 3-year period starting from the end of last required 2-year Audit Period	Within six months after end of 3-year Audit Period
<i>Example</i>	<i>Last required Audit Period start date of August 2, 2021; Audit Period of August 2, 2021 through August 1, 2024</i>	<i>February 1, 2025</i>

Three-Year Ongoing Audit Period

	Audit Period	Audit Due Date
Each Enrollee	A 3-year period starting from the end of last required Audit Period	Within six months after end of 3-year Audit Period

5.5. Six-Year Sewer System Management Plan Update

At a minimum, the Enrollee shall update its Sewer System Management Plan every six (6) years after the date of its last Plan Update due date. (For an Enrollee previously regulated by Order 2006-0003-DWQ, the six-year period shall commence on the due date identified in section 3.11 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this Order. The Updated Sewer System Management Plan must include:

- Elements required in Attachment D (Sewer System Management Plan – Required Elements) of this Order;
- Summary of revisions included in the Plan update based on internal audit findings; and
- Other sewer system management-related changes.

The Enrollee’s governing entity shall approve the updated Plan. The Legally Responsible Official shall upload and certify the approved updated Plan in the online CIWQS Sanitary Sewer System Database in accordance with section 3.11 (Sewer System Management Plan Reporting Requirements) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order. During the time period in between Plan updates, the Enrollee shall continuously document changes to its Sewer System Management Plan in a change log attached to the Plan.

5.6. System Resilience

The Enrollee shall include and implement system-specific procedures in its Sewer System Management Plan to proactively prioritize: (1) operation and maintenance, (2) condition assessments, and (3) repair and rehabilitation, to address ongoing system resilience, as specified in Attachment D (Sewer System Management Plan – Required Elements) of this General Order.

5.7. Allocation of Resources

The Enrollee shall:

- Establish and maintain a means to manage all necessary revenues and expenditures related to the sanitary sewer system; and
- Allocate the necessary resources to its sewer system management program for:
 - Compliance with this General Order,
 - Full implementation of its updated Sewer System Management Plan,
 - System operation, maintenance, and repair, and
 - Spill responses.

5.8. Designation of Data Submitters

The Legally Responsible Official may designate one or more individuals as a Data Submitter for reporting of spill data. The Legally Responsible Official shall authorize the designation of Data Submitter(s) through the online [CIWQS database](https://ciwqs.waterboards.ca.gov) (<https://ciwqs.waterboards.ca.gov>) prior to the individuals establishing a [CIWQS user account](https://ciwqs.waterboards.ca.gov/ciwqs/newUser.jsp) (<https://ciwqs.waterboards.ca.gov/ciwqs/newUser.jsp>) and entering spill data into the online CIWQS Sanitary Sewer System Database.

The Legally Responsible Official shall submit any change to its Data Submitter(s), and/or change in Data Submitter contact information, to the State Water Board within 30 calendar days of the change, by emailing ciwqs@waterboards.ca.gov and copying the appropriate Regional Water Board as provided in Attachment F (Regional Water Quality Control Board Contact Information) of this General Order.

5.9. Reporting Certification

The Legally Responsible Official shall electronically certify, on the Enrollee's behalf, all applications, reports, the Sewer System Management Plan(s) and corresponding updates, and other information submitted electronically into the online CIWQS Sanitary Sewer System Database, as follows:

"I certify under penalty of perjury under the laws of the State of California that the electronically submitted information was prepared under my direction or supervision. Based on my inquiry of the person(s) directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete, and complies with the Statewide Sanitary Sewer Systems General Order. I am aware that there are significant penalties for submitting false information."

Hardcopy submittals to the State Water Board must be accompanied by the above certification statement.

5.10. System Capacity

The Enrollee shall maintain the system capacity necessary to convey: (1) base flows during dry weather conditions, and (2) wet weather peak flows consistent with designated local historic storms. Design storms must take into account system-specific stormwater contributions via inflow and infiltration, and location-specific depth of groundwater and storm frequencies. The Enrollee shall implement capital improvements to provide adequate hydraulic capacity to:

- Meet or exceed the design criteria as defined in the Enrollee's System Evaluation and Capacity Assurance element of its Sewer System Management Plan; and
- Prevent system capacity-related spills, and adverse impacts to the treatment efficiency of downstream wastewater treatment facilities.

5.11. System Performance Analysis

The Enrollee shall include a running 10-year system performance analysis in its Annual Report. The analysis must include two CIWQS-generated graphs presenting the following information:

Graph 1 – Total Spill Volume per Year:

X axis: A 10-year period which includes the current calendar year and the nine previous calendar years;

Y axis: The total spill volume, per Spill Category, for each calendar year.

Graph 2 – Total Number of Spills per Year:

X axis: A 10-year period which includes the current calendar year and the nine previous calendar years;

Y axis: The total number of spills, per Spill Category, for each calendar year.

The current calendar year is the calendar year covered in the Annual Report.

The Enrollee shall generate the graphs in CIWQS, using the existing data in the online CIWQS Sanitary Sewer System Database at the following graph generation link: (https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportSSOServlet?reportAction=criteria&reportId=sso_operation_report).

5.12. Spill Emergency Response Plan and Remedial Actions

For Existing Enrollees (with regulatory coverage under Order 2006-0003-DWQ):

Within six (6) months of the Adoption Date of this General Order, the Enrollee shall update and implement its Spill Emergency Response Plan, per Attachment D, section 6 (Spill Emergency Response Plan) of this General Order.

For New Enrollees:

Within six (6) months of the Application for Enrollment approval date, the Enrollee shall develop and implement a Spill Emergency Response Plan, per Attachment D, section 6 (Spill Emergency Response Plan) of this General Order.

The Enrollee shall certify, in its Annual Report, that its Spill Emergency Response Plan is up to date.

The Spill Emergency Response Plan shall include measures to protect public health and the environment. The Enrollee shall respond to spills from its system(s) in a timely manner that minimizes water quality impacts and nuisance by:

- Immediately stopping the spill and preventing/minimizing a discharge to waters of the State;
- Intercepting sewage flows to prevent/minimize spill volume discharged into waters of the State;
- Thoroughly recovering, cleaning up and disposing of sewage and wash down water; and
- Cleaning publicly accessible areas while preventing toxic discharges to waters of the State.

5.13. Notification, Monitoring, Reporting and Recordkeeping Requirements

The Enrollee shall comply with notification, monitoring, reporting, and recordkeeping requirements in Attachment E1 of this General Order.

5.13.1. Spill Categories

Individual spill notification, monitoring and reporting must be in accordance with the following spill categories:

- **Category 1 Spill**

A Category 1 spill is a spill of any volume of sewage from or caused by a sanitary sewer system regulated under this General Order that results in a discharge to:

- A surface water, including a surface water body that contains no flow or volume of water; or
- A drainage conveyance system that discharges to surface waters when the sewage is not fully captured and returned to the sanitary sewer system or disposed of properly.

Any spill volume not recovered from a drainage conveyance system is considered a discharge to surface water, unless the drainage conveyance system discharges to a dedicated stormwater infiltration basin or facility.

A spill from an Enrollee-owned and/or operated lateral that discharges to a surface water is a Category 1 spill; the Enrollee shall report all Category 1 spills per section 3.1 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

- **Category 2 Spill**

A Category 2 spill is a spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.

A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill.

- **Category 3 Spill**

A Category 3 spill is a spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.

A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill.

- **Category 4 Spill**

A Category 4 spill is a spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.

A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

5.13.2. Annual Report

The Enrollee shall submit an Annual Report (previously termed as Collection System Questionnaire in Order 2006-0003-DWQ) as specified in section 3.9 (Annual Report) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

For new Enrollees: Within 30 days of obtaining a CIWQS account, a new Enrollee shall submit its initial Annual Report, as specified in section 3.9 (Annual Report) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

5.14. Electronic Sanitary Sewer System Service Area Boundary Map

For continuing enrollees, starting on July 1, 2025, and no later than December 31, 2025:

For new enrollees – no earlier than July 1, 2025, or within 12 months of the Application for Enrollment approval date, whichever date is later:

The Legally Responsible Official shall submit, to the State Water Board, geospatial data detailing the locations of the Enrollee’s sanitary sewer system service area boundary, per the required content and specifications in section 3.8 (Electronic Sanitary Sewer System Service Area Boundary Map) of Attachment E1 of this General Order, for each system identified by a WDID number.

An Enrollee of a disadvantaged community that may need assistance developing an electronic map to comply with this requirement, may contact State Water Board staff for assistance at SanitarySewer@waterboards.ca.gov.

5.15. Voluntary Reporting of Spills from Privately-Owned Sewer Laterals and/or Private Sanitary Sewer Systems

Within 24 hours of becoming aware of a spill (as described below) from a private sewer lateral or private sanitary sewer system that is not owned/operated by the Enrollee, the Enrollee is encouraged to report the following observations to the online CIWQS Sanitary Sewer System Database at the following link:

<https://ciwqs.waterboards.ca.gov>:

- A spill equal or greater than 1,000 gallons that discharges (or has a potential to discharge) to a water of the State, or a drainage conveyance system that discharges to waters of the State; **or**
- Any volume of sewage that discharges (or has a potential to discharge) to surface waters.

In the CIWQS module, the Enrollee is encouraged to identify:

- Time of observation;
- Description of general spill location (for example, street name and cross street names);
- Estimated volume of spill;
- If known, general description of spill destination (for example, flowing into drainage channel, flowing directly into a creek, etc.); and
- If known, name of private system owner/operator.

The CIWQS database will make the name and contact information of the entity voluntarily reporting a private spill, accessible to State and Regional Water Board staff only. The CIWQS database will only make information regarding the actual spill, accessible to the public.

5.16. Voluntary Notification of Spills from Privately-Owned Laterals and/or Systems to the California Office of Emergency Services

Upon observing or acquiring knowledge of any of the following from a private sewer lateral or private sanitary sewer system that is not owned/operated by the Enrollee, the Enrollee is encouraged to notify the California Office of Emergency Services (as provided by Health and Safety Code section 5410 et. seq. and Water Code section 13271), or inform the responsible party that State law requires such notification to the Office of Emergency Services by any person that causes or allows a sewage discharge to waters of the State:

- A spill equal to 1,000 gallons or more that discharges (or has a potential to discharge) to waters of the State, or a drainage conveyance system that discharges to waters of the State; or
- A spill of any volume to surface waters.

5.17. Unintended Failure to Report

If an Enrollee becomes aware that they unintentionally failed to submit relevant facts in any report required in this General Order, the Enrollee shall promptly notify Regional Water Board and State Water Board staff. Regional Water Board contact information is included in Attachment F of this Order. State Water Board staff shall be contacted by email at SanitarySewer@waterboards.ca.gov for assistance in formally amending the corresponding report(s) in the online CIWQS Sanitary Sewer System Database.

5.18. Duty to Report to Water Boards

In accordance with Water Code section 13267 and/or section 13383, upon request by the State Water Board Executive Director (or designee) or a Regional Water Board Executive Officer (or designee), the Enrollee shall provide the requested information which the State or Regional Water Board deems necessary to determine compliance with this General Order.

5.19. Operation and Maintenance

To prevent discharges to the environment, the Enrollee shall maintain in good working order, and operate as designed, any facility or treatment and control system designed to contain sewage and convey it to a treatment plant.

6. PROVISIONS

6.1. Enforcement Provisions

The following enforcement provisions are based on existing federal and state regulations, laws and policies, including the federal Clean Water Act, the state Water Code and the State Water Board Enforcement Policy.

6.1.1. Enforceability of Clean Water Act and Water Code Violations

Noncompliance with requirements of this General Order or discharging sewage without enrolling in this General Order constitutes a violation of the Water Code and a potential

violation of the Clean Water Act and is grounds for an enforcement action by the State Water Board or the applicable Regional Water Board. Failure to comply with the notification, monitoring, inspection, entry, reporting, and recordkeeping requirements may subject the Enrollee to administrative civil liabilities of up to \$10,000 a day per violation pursuant to Water Code section 13385; up to \$1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement. Discharging waste not in compliance with the requirements of this General Order or the Clean Water Act may subject the Enrollee to administrative civil liabilities up to \$10,000 a day per violation and additional liability up to \$10 per gallon of discharge not cleaned up after the first 1,000 gallons of discharge; up to \$5,000 a day per violation pursuant to Water Code section 13350 or up to \$20 per gallon of waste discharged; or referral to the Attorney General for judicial civil enforcement.

6.1.2. Monetary Penalties

The Water Code provides the State and Regional Water Boards the authority to pursue formal enforcement actions, including imposing administrative liability and civil monetary penalties, for non-compliance with the requirements of this General Order and violations of the Clean Water Act.

6.1.3. Falsifying or Failure to Report

The Water Code provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this General Order, or falsifying any information provided in the technical or monitoring reports is subject to administrative liability and civil monetary penalties. Any person who knowingly fails or refuses to furnish technical or monitoring program reports or falsifies any information provided in reports required by this General Order is subject to criminal penalties.

6.1.4. Severability of General Order

The provisions of this General Order are severable; if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this Order shall not be affected thereby.

6.1.5. Indirect Discharges

In the event that a spill enters into a drainage conveyance system, the Enrollee shall take all feasible steps to prevent discharge of sewage into waters of the State by blocking or redirecting the flow in the drainage conveyance system, removing the sewage from the drainage conveyance system, and cleaning the system in a manner that does not inadvertently impact beneficial uses of the receiving water body.

6.1.6. Water Boards' Considerations for Discretionary Enforcement

Consistent with the State Water Board Enforcement Policy, when considering Water Code section 13327 factors, the State Water Board or a Regional Water Board may consider the Enrollee's efforts to contain, control, clean up, and mitigate spills. In assessing the factors, the State Water Board or the applicable Regional Water Board will consider:

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- The Enrollee's compliance with this General Order with a focus on compliance with reporting requirements;
- The Enrollee's provision of adequate funding to implement the requirements of this General Order;
- The Enrollee's compliance with providing a complete and updated Sewer System Management Plan;
- The Enrollee's compliance with implementing its Sewer System Management Plan;
- The overall effectiveness of the Enrollee's Sewer System Management Plan with respect to:
 - System management, operation, and maintenance,
 - Adequate treatment facilities, sanitary sewer system facilities, and/or components with an appropriate design capacity, to reasonably prevent spills (e.g. adequately enlarging treatment or collection facilities to accommodate growth, infiltration and inflow, etc.),
 - Preventive maintenance (including cleaning, root grinding, and fats, oils, and grease control) and source control measures,
 - Implementation of backup equipment,
 - Inflow and infiltration prevention and control,
 - Appropriate sanitary sewer system capacity to prevent spills, and
 - The Enrollee's responsiveness to stop and mitigate the impact of the discharge;
- The Enrollee's compliance with identifying the cause of the spill;
- The Enrollee's use of available information and observations to accurately estimate the spill volume and identify the affected or potentially affected receiving waters;
- The Enrollee's thoroughness of cleaning up sewage in drainage conveyance systems after the spill(s);
- The Enrollee's use of water quality and biological monitoring and assessment to determine the short-term and long-term impacts to beneficial uses and the environment;
- The Enrollee's follow up actions to improve system performance;
- The Enrollee's implementation of feasible alternatives to prevent spills, such as:
 - Use of temporary storage or waste retention,
 - Reduction of system inflow and infiltration,
 - Collection and hauling of waste to a treatment facility,
 - Prevention of and/ or containment of spills due to a design storm event identified in the Enrollee's Sewer System Management Plan,

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- Implementation of available equipment, technologies, strategies, and recommended industry practices for maintaining and managing sewer systems to prevent spills, and contain and eliminate discharges to waters of the State; and
- The spill duration and factors beyond the reasonable control of the Enrollee causing the event.

6.1.7. Enforcement Discretion Based on Reporting Compliance

Consistent with the State Water Board Enforcement Policy, the State Water Board or a Regional Water Board may consider the Enrollee's efforts to comply with spill reporting requirements when determining compliance with Water Code section 13267 and section 13383. When assessing Water Code section 13227 factors, the State Water Board or the applicable Regional Water Board will consider:

- The Enrollee's diligence to comply with all reporting requirements in this General Order;
- The use of best available information for the Enrollee's reporting of spill start date and start time in which the release of sewage from the sanitary sewer system initiated;
- The Enrollee's reporting of spill end date, and end time to be the date and time in which the release of sewage from the sanitary sewer system was stopped;
- The Enrollee's diligence to accurately estimate and report spill volumes;
- The Enrollee's subsequent verification and/or updates to initial Draft Spill Reports in accordance with this General Order; and
- The Enrollee's timely certification of required spill reports.

Consistent with Water Code section 13267 and section 13383, the State Water Board or a Regional Water Board may require an Enrollee to report the results of a condition assessment of a specified portion of the Enrollee's sanitary sewer system.

6.2. Other Regional Water Board Orders

It is the intent of the State Water Board that sanitary sewer systems be regulated in a manner consistent with federal and state regulations. This Order will not be interpreted or applied:

- In a manner inconsistent with the federal Clean Water Act;
- To authorize a spill or discharge that is illegal under either the Clean Water Act, the Water Code, and/or an applicable Basin Plan prohibition or water quality standard;
- To prohibit a Regional Water Board from issuing an individual National Pollutant Discharge Elimination System (NPDES) permit or individual waste discharge requirements superseding an Enrollee's regulatory coverage under this General Order for a sanitary sewer system authorized under the Clean Water Act or Water Code;

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- To supersede any more specific or more stringent waste discharge requirements or enforcement orders issued by a Regional Water Board; or
- To supersede any more specific or more stringent state or federal requirements in existing regulation, an administrative/judicial order, or Consent Decree.

6.3. Sewer System Management Plan Availability

The Enrollee's updated Sewer System Management Plan must be maintained for public inspection at the Enrollee's offices and facilities and must be available to the public through CIWQS and/or on the Enrollee's website, in accordance with section 3.8 (Sewer System Management Plan Reporting Requirements) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

6.4. Entry and Inspection

6.4.1. Entry and Availability of Information

The Enrollee shall allow State and Regional Water Board staff, upon presentation of credentials and other documents as may be required by law, to:

- Enter upon the Enrollee's premises where a regulated facility or activity is located or conducted, or where records are kept under the requirements of this General Order;
- Have access to and reproduce any records required to be maintained by this General Order;
- Inspect any facility and/or equipment (including monitoring and control equipment), practices, or operations required in this General Order; and
- Sample or monitor substances or parameters for assuring compliance with this General Order, or as otherwise authorized by the Water Code.

6.4.2. Pre-Inspection Questionnaire

The Enrollee shall provide pre-inspection information to State and Regional Water Board staff through the completion of a Pre-Inspection Questionnaire provided by Water Board staff.