

WASTEWATER COMMITTEE MEETING
TUESDAY, JUNE 28, 2022– 8:30 AM

Vice Mayor Rodney Plamondon
Council Member Diane Wratten
Dan Epperson, Alternate

**DUE TO THE GOVERNOR'S EXECUTIVE ORDER N-29-20 ADOPTED
MARCH 17, 2020 THE CITY OF IONE WILL BE
CONDUCTING THEIR MEETING VIA TELECONFERENCE AND IN
PERSON AT 1. E. MAIN STREET**

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I. CALL TO ORDER

II. PLEDGE OF ALLEGIANCE

III. ROLL CALL

IV. PUBLIC COMMENT: **EACH SPEAKER IS LIMITED TO 4 MINUTES**

NOTE: This is the time for members of the public who wish to be heard on matters that do not appear on the Agenda. Persons may address the Wastewater Committee at this time on any subject within the jurisdiction of the Wastewater Committee.

Is there any person in the audience who wishes to address the Council at this time?

V. REGULAR AGENDA:

1. Discussion of Temporary 6-month Agreement with ARSA August 1, 2022 – January 31, 2023

2. Update on the WWTP Fee Study

3. Discussion and Consideration of recommending to the City Council that a Professional Services Agreement with West Yost for Updating the WWTP WDR Permit, removing the Cease and Desist Order (CDO), conducting a seepage study, and retaining expert waste water legal counsel be considered at the August 2, 2022 Council Meeting.

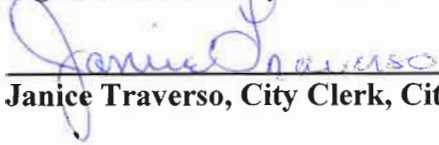
VI. ADJOURNMENT

ADA COMPLIANCE STATEMENT

In compliance with the American with Disabilities Act, if you need special assistance to participate in this meeting, please contact City Clerk Janice Traverso at (209) 274-2412, ext. 102. Notification 24 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

I, Janice Traverso, the City Clerk of the City of Ione, declare under the penalty that the foregoing agenda for the June 28, 2022 Wastewater Committee of the Ione City Council was posted on June 25, 2022 at the office of the City of Ione City Hall at 1 East Main Street, Ione, CA 95640 and the United States Post Office at 22 W. Main Street, Ione, CA 95640 and was available for public review at those locations.

Signed this 25th day of June, 2022 at Ione, California



Janice Traverso, City Clerk, City of Ione



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June 14, 2022

SENT VIA: EMAIL

Mr. Michael Rock
Interim City Manager
City of Lone
PO Box 398, 1 East Main Street
Lone, CA 95640

SUBJECT: Proposal for WDRs Renewal Assistance for the City of Lone Wastewater Treatment Plant

Dear Michael,

West Yost appreciates the opportunity to continue assisting the City of Lone (City) with services related to renewing the discharge permit for the City's wastewater treatment and disposal facilities. This letter proposal provides the City with a proposed Scope of Services, Budget and Schedule for assisting the City with renewal of Waste Discharge Requirements (WDRs) Order R5-2013-0022-001, which govern discharge and reuse of secondary effluent from the City's Wastewater Treatment Facility (WWTF); renewal of WDRs Order 93-240, which govern treatment and use of recycled water from the City's Castle Oaks Water Reclamation Plant (COWRP); and rescission of Cease and Desist Order (CDO) R5-2014-0157.

PROJECT UNDERSTANDING

This section presents West Yost understanding of the current issues and associated evaluation efforts needed to support this project.

Desired Permit Modifications

WDRs Order R5-2013-0022-001, hereinafter referred to as the WWTF Permit, was last amended by the Central Valley Regional Water Quality Control Board (Regional Board) in December 2014. The CDO was also adopted at this time. WDRs Order 93-240, hereinafter referred to as the COWRP Permit, was adopted in 1993, and a revised Monitoring and Reporting Program (MRP) for the COWRP Permit was issued in October 2021. All four of these orders are out of date and reflect information that needs to be updated. Key updates include:

- Acknowledging recent improvement projects: lining of treatment Ponds 1 through 4 and storage Pond 5, incorporation of the Town and WWTF Fields, and the treatment facility-related improvements.
- Acknowledging recent contractual changes between the City and Mule Creek State Prison (Mule Creek) and Amador Regional Sanitation Authority (ARSA) that result in reduced flows from these facilities to the WWTF and COWRP.

- Allowing for discharging secondary effluent from the WWTF to the COWRP for treatment and reuse on the Castle Oaks golf course following completion of a new pipeline between these facilities.
- Increasing of the permitted treatment and disposal capacity given the changes described above.
- Providing a new time schedule to allow the City time to document and confirm the benefit of recent improvements and make additional improvements, if needed.

The City and West Yost had a call with Regional Board permitting staff in March 2022 to discuss what efforts are needed to support a Report of Waste Discharge (ROWD), which will serve as the City's formal request for revising the WDRs and rescinding CDO. Key items that were raised by the Regional Board staff that will need to be addressed in the ROWD include the need for the following efforts:

- Updating the COWRP permit, which is partially what led the City's decision that combining the two WDRs into one permit would be a prudent course of action.
- Documenting the available treatment and disposal capacity given the recent lining of the ponds and the proposed changes in operations (including the changes in discharge from Mule Creek and ARSA).
- Completing a comprehensive seepage study to assess whether the WWTF is contributing flows to Sutter Creek.
- Documenting the iron and manganese groundwater quality improvements near the WWTF site that have resulted from the recent lining of the treatment ponds.

Permitting Strategy and Contract Review Support

As noted above, the City currently has contracts with ARSA and Mule Creek that impact the operations of the WWTF and COWRP. In addition, the current COWRP permit lists the Amador Regional Outfall, Castle Oaks Golf Course and Development, ARSA, the City, and Portlock International Inc. as permitted entities. However, the WWTF, the COWRP, and Castle Oaks Golf Course are all owned by the City and are operated under a contract between the City and other parties. Although we understand that the City does have contracts with each of the parties named under the current COWRP permit, it is unclear why these parties are listed as permitted entities.

Based on our understanding, it is not apparent that any other entity besides the City needs to be named in the permit for the WWTF and COWRP. There is also no apparent reason for the WWTF and COWRP to be permitted separately. However, to confirm this understanding, it is recommended that the City complete a legal review of the existing contracts and the current permitting structure to confirm that the City's preferred approach as being named the sole permittee for both the WWTF and COWRP facility is appropriate and legal. The City should also understand what potential liabilities could arise if the City is named as a sole permittee.

West Yost will rely on the support from Somach, Simmons, and Dunn (SSD), an environmental law firm that specializes in serving California water and wastewater agencies on a wide range of contracting and permitting issues. SSD will specifically complete a review of the current contracts and permitting structure and provide a legal opinion regarding the City's preferred permitting strategy. In addition, time is included in our proposal for SSD to provide "As Needed" support related to any permitting or contractual issues. This support could also include participation in meetings with the Regional Board, as appropriate.

Capacity Analysis

The current WDRs limit the discharge capacity of the WWTP to 0.52 million gallons per day (mgd) as Average Dry Weather Flow (ADWF). Recent studies have shown that with the implementation of the pipeline connection to the COWRP plant, the available treatment plant capacity could exceed 0.7 mgd as ADWF.

To support an increase in treatment capacity in the renewed WDRS, a capacity analysis is needed to confirm the available treatment and disposal capacity following the recent and planned changes to the WWTF and COWRP operations. This analysis will need to include both a water balance to confirm the available storage and discharge capacity and a treatment plant capacity analysis that considers the treatment pond's the Biochemical Oxygen Demand (BOD) treatment capacity.

Water balances of the WWTF operation were prepared as part of the *Water Balance Update and 2020 Capacity Expansion Completion Report* prepared in March 2021 by Coastland for the City. Several water balances were prepared to evaluate WWTF storage and disposal needs under various source flow and WWTF operating conditions, such as possible lining of Ponds 6 and 7. An updated water balance will be prepared to estimate the flow capacity of the WWTF, given the use of the WWTF ponds, the CORWP facility, and the planned source water changes. The water balance will also be used to determine what additional storage may be needed if seepage from the WWTF percolation ponds is ultimately determined to be an issue for Sutter Creek.

An analysis of the WWTF BOD treatment capacity analysis was completed in December 2016 by Dexter Wilson Engineering. This analysis applied theoretical BOD removal rates to conclude that the WWTF could accommodate the treatment of up to 0.7 mgd. However, the City has indicated that flows to the WWTF are likely to exceed 0.7 mgd over the next 20-year period. Moreover, application of theoretical BOD removal rates does not account for site-specific conditions that can impact plant capacity. Therefore, a calibrated spreadsheet model of the WWTF will be prepared to demonstrate the current BOD treatment capacity. This more detailed analysis will be needed to support the City's request for an increase in the WWTF permitted flow.

Seepage Study

Over the history of the WWTF operations, there have been questions raised regarding the seepage from the WWTF (and to some extent the Castle Oaks Golf Course) to Sutter Creek that need to be addressed and resolved. The WWTF Permit and CDO both assert that the WWTF operations are allowing seepage of groundwater into the neighboring Sutter Creek. Because the City does not have a permit for surface discharge into Sutter Creek, this issue is of major concern to the Regional Board.

Discussions with the City indicate that there are naturally-occurring shallow groundwater levels and springs around the WWTF and Castle Oaks Golf Course, which are likely the major source of flow in Sutter Creek. A comprehensive seepage study is needed to evaluate whether these shallow groundwater levels and springs are the primary source of flow in Sutter Creek, or seepage from the WWTF ponds (and possibly the Castle Oak Golf Course storage ponds) are significantly contributing flow to Sutter Creek.

Ultimately, a definitive seepage study may require development of a numerical model capable of simulating shallow groundwater conditions, stream flow in Sutter Creek, and interactions between the shallow groundwater and Sutter Creek. However, there is limited data currently available to develop a calibrated model. Therefore, our proposed approach is to first develop a hydrogeologic conceptual model using available topographic, soils, geologic and groundwater level mapping to demonstrate the physical hydrology in the area and the relationship between the shallow groundwater system and Sutter Creek. This conceptual understanding would then be used to define the likelihood of the WWTF being a major contributor to Sutter Creek flows and identify the additional data collection and modeling efforts needed to provide a definitive assessment of the WWTF's contributions (if needed).

It is anticipated that the conceptual model analysis will be documented in a separate Technical Memorandum to facilitate discussions with the Regional Board regarding the seepage issue prior to submittal of the ROWD. As appropriate, the conceptual model analysis will also define the additional steps needed (if any) to provide the definitive analysis needed to by the Regional Board to dismiss the seepage issue. This more definitive analysis, if needed, would include developing a calibrated numerical model capable of simulating shallow groundwater and stream flow conditions with and without seepage from the WWTF and Castle Oak recycled water storage ponds. If these additional modeling steps are identified as necessary, the ROWD will document the timeline needed to complete these additional efforts. However, development of the numerical model is not included in this proposal.

Iron and Manganese Exceedances in Groundwater

The iron and manganese concentrations exceed ambient concentrations in shallow groundwater near the WWTF and the WDRs and CDO indicate that that the WWTF operations are creating the anoxic conditions in the soils beneath the site that cause these iron and manganese exceedances. However, the City has recently lined the Ponds 1 through 5, and seepage from the WWTF has been significantly reduced. Indeed, recent groundwater monitoring indicates that iron concentrations have decreased since the pond lining project was complete. Nevertheless, manganese concentrations continue to remain elevated. Moreover, naturally-occurring shallow groundwater near Sutter Creek would also cause the anoxic conditions that result in iron and manganese being leached from aquifer sediments into local groundwater.

It is unclear from the currently available data whether the WWTF operations are the primary cause of the anoxic conditions near the site leading to elevated iron and manganese levels. The seepage study described above will inform the evaluation of whether the WWTF operations are likely the primary cause of anoxic conditions and thus the observed elevated iron and manganese levels. This information will be detailed in ROWD, along with a characterization of the shallow groundwater conditions near the WWTF and CORWP sites.

A review of the City's monitoring well network indicates that there are not likely any monitoring wells located within the direct influence of Sutter Creek but outside the influence of the WWTF. Therefore, modifications are likely needed to the shallow monitoring well network to evaluate the potential for naturally occurring elevated groundwater levels to be leading to anoxic conditions. Development of a numerical model of the groundwater near the WWTF and COWRP facilities could also drive the need for monitoring well network modifications. Under this effort, West Yost will prepare a justification for modifications to the monitoring well network to include in the ROWD. These modifications could include recommendations for the addition of new wells and removal of some of the existing wells. The ROWD will also provide a schedule for completing the monitoring well network changes and completing the assessment of whether the WWTF is continuing to contribute to elevated iron and manganese in shallow groundwater.

Permit Renewal Timeline

The City is in the process of designing the new pipeline to connect the WWTF to the COWRP that will provide for the use of the City's treated wastewater for irrigation of the Castle Oaks Golf Course. The current anticipated timeline for completion of construction for this pipeline is the summer of 2023. It is understood that the City can rely on recycled water generated from other wastewater sources to meet the demands of the Castle Oaks Golf Course for the near term. However, it is desirable that the City obtain the ability to direct flow from the WWTF to the COWRP and Castle Oaks Golf Course as soon as possible.

The City will not be able to use the new pipeline connection between the WWTF and COWRP until the Regional Board has approved its use. Given the Regional Board staff's caseload, it is not likely that a revised WDRs would be issued by summer of 2023. Nevertheless, California Water Code Section 13264 allows for a new discharge or material change to an existing discharge to begin prior to issuance of discharge permit if 140 days have passed since the submittal of an ROWD describing the discharge¹. Therefore, assuming the City will need to start using the pipeline summer 2023, the ROWD must be submitted in early spring 2023. The schedule for providing the ROWD under this proposal is based on meeting this deadline.

Meeting this deadline will be complicated by the complex nature of the City's WDR renewal process. During the March 2022 call with the Regional Board staff, they suggested the following specific steps toward completing the ROWD:

1. Meet with both Regional Board permitting and enforcement staff at the initiation of the process to discuss the overall approach for the Seepage Study and ROWD
2. Meet with both Regional Board permitting and enforcement staff to present the findings from the conceptual Seepage Study and the WWTP capacity analysis, and to discuss an annotated ROWD outline.
3. Meet with both Regional Board permitting and enforcement staff to discuss a draft ROWD prior to its formal submission.
4. Prepare a final ROWD for submission.
5. Meet with both Regional Board permitting and enforcement staff approximately three months after the ROWD is submitted and prior to the initiation of discharges from the WWTF to the COWRP facility.

This level of Regional Board interaction during development of a ROWD is not common. However, there have been several contentious issues raised related to the WWTF over the last few years, and close coordination with Regional Board staff is recommended to help ensure they are receiving the information needed to support the City's requests.

¹ The discharge cannot "create or threaten to create a condition of pollution or nuisance" and must meet specific environmental review requirements. Given our understanding of the nature of the project and proposed changes, these criteria should be satisfied.

It is also anticipated that the City will require support with reviewing the draft WDRs as they are issued for review/comment and adoption. However, the timeline for the Regional Board's development of a draft and final WDRs and recission of the CDO are unclear and will be informed through the coordination efforts described above. Moreover, these coordination efforts will reveal what, if any, additional evaluations are needed to support the City's desired outcomes. Therefore, this scope of services is limited to completing the ROWD and providing support through the coordination efforts described above.

This scope of services does include an "As Needed Services" task that can support some follow-on work and associated Regional Board coordination. Nevertheless, it is very likely the City will require support beyond what can be provided through this "As Needed Services" task to complete the permit renewal process. The City will also likely require support with studies that are expected to be necessary once the WDRs are adopted. For example, the WDRs may include a timeline for installation of monitoring wells and/or the development of a numerical seepage model. West Yost will work with the City to define these later tasks as their need and associated efforts become clearer.

SCOPE OF SERVICES

The following is a list of the key tasks necessary to perform this proposed Scope of Services, each further described below:

- Task 1. Contract and Permit Structure Review
- Task 2. Capacity Analysis
- Task 3. Seepage Study
- Task 4. ROWD
- Task 5. Regional Board Meetings and Coordination
- Task 6. As-Needed Support
- Task 7. Project Management

Task 1. Contract and Permit Structure Review

The West Yost team will complete a legal review of the existing contracts and the current WWTF permitting structure to confirm that the City's preferred approach as being named the sole permittee for both the WWTF and COWRP facility is appropriate and legal. The review will also identify potential liabilities could arise if the City is named as a sole permittee.

A draft Contract and Permit Structure Review memorandum will be provided to the City for review. West Yost will coordinate one meeting with the City to the findings in this draft memorandum. Following this discussion with the City, West Yost will facilitate a meeting with the Regional Board (Meeting No. 1 under Task 5) where the permitting approach will be discussed.

Task 1 Assumptions

- Work performed under this task will be maintained under attorney-client privilege.

Task 1 Deliverables

- West Yost will prepare a draft Contract and Permit Structure Review memorandum in PDF format.

Task 2. Capacity Analysis

West Yost will develop an updated monthly water balance model of the WWTF storage and disposal facilities to define the capacity of these systems. The water balance will incorporate the following information:

- Recent influent flow data provided by the City
- Updates to previously developed relationships between rainfall and inflow and infiltration to the WWTF
- Climatological factors (precipitation and evaporation)
- Irrigation demands of the Castle Oak Golf Course
- Water supplied by Mule Creek Prison and ARSA (as appropriate)
- Current storage ponds volumes
- Town Field and City Field irrigation surface areas and cropping patterns provided by the City

The water balance will be calibrated based on data from recent year's operations. The calibrated water balance will be used to define the impacts of potential future changes, as follows:

- The available disposal capacity if Pond 6 needs to be lined to prevent seepage into Sutter Creek
- The available disposal capacity if Pond 6 and Pond 7 need to be lined to prevent seepage into Sutter Creek
- How much additional storage volume and/or land application area is needed to offset the capacity reduction if Pond 6, or Ponds 6 and 7, need to be lined.

West Yost will develop a calibrated BOD treatment model of the WWTF ponds to confirm the treatment capacity. The calibrated model will rely on the following data:

- Recent WWTF influent flow and load data,
- BOD and soluble BOD concentration data collected into and out of each of the treatment ponds
- Pond temperature data
- Pond Dissolved Oxygen data

The calibrated model will then be used to define to total treatment capacity of the WWTF ponds.

Following development of the Capacity analysis, West Yost will present the findings to the City in a meeting. Following this City review and discussion, the findings will be presented to Regional Board staff at Meeting No. 2, described under Task 5.

The results of these capacity analysis efforts will also be summarized in a Capacity Analysis TM following receiving feedback from the Regional Board at Meeting No. 2. A draft TM will be provided to the City for review. A final TM will be prepared that incorporates City comments on the draft and will be submitted to the City with the Draft ROWD. The findings of the Capacity Analysis will also be integrated in the analysis and conclusions presented in the ROWD.

Task 2 Assumptions

- The City will conduct BOD, soluble BOD, DO and temperature monitoring between the treatment ponds and provide the monitoring results in an electronic, Excel-compatible format.

Task 2 Deliverables

- West Yost will provide a presentation of the Capacity Analysis TM for the City and Regional Board staff provided in PowerPoint format. This will be presented to the City for input and then later to the Regional Board at Meeting No. 2 under Task 5.
- West Yost will prepare a draft Capacity Analysis TM in PDF format.
- West Yost will prepare a Final Capacity Analysis TM in PDF format as an appendix to the Draft and Final ROWD.

Task 3. Seepage Study

West Yost will develop a hydrogeologic conceptual model describing the shallow groundwater system, stream flow in Sutter Creek, the interactions between the shallow aquifer and Sutter Creek, the interactions between the shallow aquifer and the WWTF ponds, the interactions between the shallow aquifer and the Castle Oak Golf Course recycled water storage ponds, and how each of these factors may influence shallow groundwater discharging to Sutter Creek. To support the development of this model, West Yost will compile the following information:

- Detailed topography (10- or 30-meter digital elevation models) from the United States Geologic Survey (USGS) National Elevation Dataset defining stream channel and other relevant topographic morphology
- Soil classification mapping from the Natural Resources Conservation Service Web Soil Survey Soil Survey Geographic Database defining the hydrologic properties of soils
- Geologic mapping from the California Geologic Survey's Preliminary Geologic Map of the Lone 7.5' Quadrangle, Amador County, California
- Groundwater level and quality data from the WWTF ponds and monitoring wells and California Department of Water Resources (DWR) Water Data Library
- Stage and flow data for Sutter Creek from the DWR Data Exchange Center and USGS National Water Information System
- Satellite imagery from USGS Earth Resources Observation and Science Center Science Processing Architecture On Demand Interface for assessing the wetted extent of the Sutter Creek stream channel and adjacent riparian areas, which may be indicative of shallow groundwater.

This information will be compiled in ArcGIS compatible formats for an area centered on the WWTF and extending across the Lone Valley from Sutter Creek's entry to the valley to the Dry Creek's exit from the valley (approximately 0.5 mile downstream of the confluence of Sutter and Dry Creeks).

West Yost will also work with the City to install a water level stage gauges in Sutter Creek upstream and downstream of the WWTF and Castle Oaks Golf Course. Accurate Sutter Creek water level information will be critical for conceptual model development. As part of this gauge installation, West Yost will conduct a coordinate survey of the existing groundwater monitoring wells and key water control points in the Castle Oak Golf Course recycled water storage ponds.

The compiled information will be used to develop a the hydrogeologic conceptual model, which will be supported by maps, cross sections and tabular summaries of key data and information. The hydrogeologic conceptual model will be used to support initial findings regarding the potential for the WWTF and Castle Oaks Golf Course ponds to contribute flows to Sutter Creek. This information will also be used to support findings related to the potential causes of the reducing conditions near the WWTF that are contributing to elevated levels of iron and manganese in shallow groundwater.

Following development of the Seepage Study analysis, West Yost will present the findings to the City. This presentation will document the data and information used, describe the hydrogeologic conceptual model, provide a preliminary assessment of whether seepage from the WWTF ponds and Castle Oaks Golf Course storage ponds influence groundwater discharge to Sutter Creek, and provide a preliminary assessment of whether naturally occurring groundwater conditions have the potential to contribute to elevated levels of iron and manganese in shallow groundwater near the WWTF site. The presentation will also address future studies or data collection activities that may be needed to confirm the conclusions of the study.

Following City review and discussion of this information at the meeting with the City, these findings will be presented to Regional Board staff at Meeting No. 2, described under Task 5.

After receiving feedback from the Regional Board at Meeting No. 2, the findings and results of the seepage study evaluated will be summarized in a Seepage Study Report. A draft Seepage Study Report will be provided to the City for review. A final Seepage Study Report will be prepared, incorporating City comments, will be included as an attachment to the draft and final ROWD. The findings of the Seepage Study Report will also be integrated in the analysis and conclusions presented in the ROWD.

Task 3 Assumptions

- The City will provide historical pond and monitoring well level data in an electronic, Excel-compatible format.
- The City will collect Sutter Creek stage data on a weekly basis following installation of the new gauges.
- The hydrogeologic conceptual documentation include up to four maps and two cross sections.
- Up to ten points will be included in the coordinate survey.
- Stage monitoring will extend from August 2022 through March 2023.
- Stage monitoring will be conducted by City staff.

Task 3 Deliverables

- West Yost will provide a presentation of the Seepage Study Report for the City and Regional Board staff provided in PowerPoint format. This will be presented to the City for input and then later to the Regional Board at Meeting No. 2 under Task 5.
- West Yost will prepare a draft Seepage Study Report in PDF formats.
- West Yost will prepare a Final Seepage Study Report in PDF format as an appendix to the Draft ad Final ROWD.

Task 4. ROWD

West Yost will prepare data request to the City for the information needed to support the ROWD.

West Yost will prepare a presentation that provides an annotated outline of the ROWD. The presentation will provide a summary of the key ROWD components, including an overview of available data or information that will be characterized in the respective ROWD component. This information summarized is expected to include

- Description of the current WPCF treatment facilities and assessment of the current treatment capacity defined under Task 1
- Description of the current WPCF storage and land application facilities and assessment of the current disposal capacity defined under Task 1
- Description of the conceptual groundwater model and findings from the Seepage Study completed under Task 2.
- Summary of groundwater quality data and findings related to elevated levels of iron and manganese

The annotated outline will be presented to the City. Following City review and incorporation of City input, the information will be presented to Regional Board staff (Meeting No. 2 under Task 5). The goal of this meeting will be to confirm that the proposed ROWD contents will be sufficient for the Regional Board staff to prepare an updated WDRs and rescind the CDO.

West Yost will prepare a draft ROWD, including a completed Form 200, that follows the Regional Board guidance document: *Technical Information for a Report of Waste Discharge*. Items that will be included are as follows:

- Description of the existing facilities
- Descriptions of the available treatment and disposal capacity, including the current water balance
- Description of planned/potential changes to the treatment or discharge facilities
- Summaries of influent and effluent flows from recent years, including irrigation flows
- Discussion of proposed changes to the City's monitoring and reporting practices to be consistent with current Regional Board standards
- Summary of groundwater quality compliance and related reports
- Summary of findings from the seepage study and any recommended additional evaluations
- Description of recent compliance history with the WDRs requirements
- Compliance of recycled water production and use with the State's Title 22 requirements.
- Summary of current land application facility best practices
- Any requests related to the groundwater monitoring well network or compliance related to iron and manganese in the shallow groundwater. The request will address the functionality of existing monitoring wells and/or identify where additional wells may be needed.

An administrative draft ROWD package will be prepared for City review. West Yost will coordinate and conduct a meeting with City following submittal of the administrative draft ROWD to discuss City comments.

A draft ROWD presentation will be developed that presents the ROWD contents and incorporates City input and comments. This draft ROWD presentation will be provided to the Regional Board staff at Meeting No.3 under Task 5 to receive input on the draft ROWD. This review step was recommended by the Regional Board staff due to the complicated nature of the permit renewal.

Following receipt of Regional Board input at Meeting No. 3 under Task, West Yost will prepare a draft ROWD package for City review. West Yost will facilitate a meeting with the City staff to receive comments and suggested changes regarding the draft ROWD package. After addressing the City's comments, West Yost will prepare a final ROWD package for submittal to the Regional Board along with a cover letter to be signed by the City and that will accompany the submittal.

Task 4 Assumption

- The City review meetings will be held virtually via MS Teams.
- The Regional Board will agree to participate in the draft ROWD review meeting and provide input before the submission of the final ROWD.

Task 4 Deliverables

- West Yost will prepare a ROWD Annotated Outline presentation in PowerPoint format. This will be presented to the City for input and then later to the Regional Board at Meeting No. 2 under Task 5.
- West Yost will prepare an administrative Draft ROWD in PDF format.
- West Yost will prepare a draft ROWD presentation in PowerPoint format. This will be presented at Meeting No. 3 under Task 5.
- West Yost will prepare a draft and Final ROWD package in PDF format.
- West Yost will prepare a draft cover letter for ROWD in MS Word format.

Task 5. Regional Board Meetings

West Yost will coordinate and lead up to four meetings with City and Regional Board staff to inform development of the ROWD. These meetings are as follows:

- **Meeting No. 1:** Confirm what items the Regional Board staff expect in the ROWD
- **Meeting No. 2:** Discuss draft Seepage Study, Capacity Analysis and ROWD outline
- **Meeting No. 3:** Discuss Draft ROWD prior to submittal of ROWD
- **Meeting No. 4:** Discuss ROWD following submittal

Prior to each meeting, West Yost will develop draft meeting agendas and presentation slides, as needed. Following each meeting, West Yost will develop meeting minutes to document key decisions made and action items. Legal support from SSD is anticipated at Meeting No. 2.

Task 5 Assumptions

- All meetings will be held virtually via MS Teams.

Task 5 Deliverables

- West Yost will prepare draft meeting agendas in MS Word format prior to each meeting.
- West Yost will provide a PowerPoint slides for Meetings No. 2 and 3.
- West Yost will prepare meeting minutes with action items in PDF format within one week of each meeting.
- West Yost will coordinate additional deliverables for this task with the City staff if and when services are requested.

Task 6. As-Needed Support

The Regional Board is not expected to adopt a revised WDRs within the timeframe of this project. Nevertheless, as the Regional Board staff develops the draft permit, they may request additional information and/or analyses to support the information provided in the ROWD. It is also possible that additional meetings may be needed to support the ROWD development. Specific efforts under this task may include but will not be limited to the following:

- Responding to Regional Board request for information or questions
- Participating in meetings with Regional Board staff following submittal of the ROWD
- Developing documentation that the 140-day window has passed since submittal of the ROWD and acknowledging the City will start discharging as described in the ROWD
- Identifying and developing a scope for additional work that may be needed based on discussions with Regional Board staff

The specific work efforts and deliverables under this task cannot reasonably be determined at this time, so the associated fee estimate presented in this letter proposal is based on a nominal effort. The scope of work under this task will be limited to work that has been specifically requested by the City and can be completed within the available budget. All work will be performed on a time and materials basis, and monthly invoices will detail the efforts and costs. Depending on the level of effort required, a scope and budget amendment may be necessary in the future.

Task 7. Project Management

This task includes project management related activities, including project initiation, general project coordination, and development and review of project invoices. Under this task, brief descriptions of services performed will be developed and included with monthly invoices.

In addition, to ensure continued achievement of consistently high-quality work products, and in accordance with the West Yost Quality Assurance/Quality Control policy, a West Yost staff member at the Principal Engineer level or higher will review significant work products. This project management task includes coordination of these efforts.

Task 7 Assumption

- The duration of the project will be approximately eighteen months.

Task 7 Deliverables

- West Yost will prepare monthly invoices and descriptions of services performed in PDF format.
- West Yost will provide a Project Schedule with Milestones in PDF format.

PROJECT BUDGET

The estimated budget for each of the tasks described above and total estimated budget are shown in Table 1. West Yost will perform all work on an hourly basis at standard company charge rates and will not exceed the estimated cost without written authorization. Attachment A provides West Yost's 2022 charge rate schedule.

If additional budget is required to complete the Scope of Services identified herein, West Yost will request City authorization prior to exceeding the budget. Any additional services not included in this Scope of Services will be performed only after receiving written authorization and a corresponding budget augmentation.

Table 1. Estimated Project Budget for City of Ione WDRs Renewal Assistance				
Task	West Yost Fee, dollars	SSD Fee, dollars	Surveying Fee, dollars	Total Fee, dollars
Task 1. Contract and Permit Structure Review	4,000	15,000	0	19,000
Task 2. Capacity Analysis	35,300	0	0	35,300
Task 3. Seepage Study	40,700	0	5,000	45,700
Task 4. ROWD	66,400	0	0	66,400
Task 5. Regional Board Meetings	13,900	1,000	0	14,900
Task 6. As Needed Support	7,400	4,000	0	11,400
Task 6. Project Management	7,100	0	0	7,100
Total Project Budget	\$174,800	\$20,000	5,000	\$199,800

SCHEDULE

A proposed project schedule is provided as Attachment B. As shown, it is anticipated that the ROWD can be submitted by March 2023, allowing for discharge to COWRP to begin by August 2023.

Thank you for providing West Yost the opportunity to be of continued service to the City of Ione. We look forward to working with you on this important project. Please call if you have any questions or require additional information.

Sincerely,
WEST YOST



Kathryn Gies, PE
Engineering Manager
RCE #65022

Attachment A. West Yost 2022 Billing Rate Schedule

Attachment B. Proposed Project Schedule



Attachment A

West Yost 2022 Billing Rate Schedule

2022 Billing Rate Schedule

(Effective January 1, 2022 through December 31, 2022)*



POSITIONS	LABOR CHARGES (DOLLARS PER HOUR)
ENGINEERING	
Principal/Vice President	\$318
Engineer/Scientist/Geologist Manager I / II	\$301 / \$315
Principal Engineer/Scientist/Geologist I / II	\$272 / \$289
Senior Engineer/Scientist/Geologist I / II	\$244 / \$256
Associate Engineer/Scientist/Geologist I / II	\$209 / \$224
Engineer/Scientist/Geologist I / II	\$168 / \$195
Engineering Aide	\$98
Field Monitoring Services	\$90
Administrative I / II / III / IV	\$86 / \$109 / \$130 / \$144
ENGINEERING TECHNOLOGY	
Engineering Tech Manager I / II	\$313 / \$315
Principal Tech Specialist I / II	\$287 / \$297
Senior Tech Specialist I / II	\$263 / \$275
Senior GIS Analyst	\$238
GIS Analyst	\$225
Technical Specialist I / II / III / IV	\$168 / \$191 / \$215 / \$240
Technical Analyst I / II	\$120 / \$144
Technical Analyst Intern	\$97
Cross-Connection Control Specialist I / II / III / IV	\$125 / \$136 / \$152 / \$170
CAD Manager	\$189
CAD Designer I / II	\$147 / \$166
CONSTRUCTION MANAGEMENT	
Senior Construction Manager	\$304
Construction Manager I / II / III / IV	\$185 / \$199 / \$211 / \$267
Resident Inspector (Prevailing Wage Groups 4 / 3 / 2 / 1)	\$162 / \$180 / \$201 / \$209
Apprentice Inspector	\$147
CM Administrative I / II	\$79 / \$106
Field Services	\$209

- Hourly rates include Technology and Communication charges such as general and CAD computer, software, telephone, routine in-house copies/prints, postage, miscellaneous supplies, and other incidental project expenses.
- Outside Services such as vendor reproductions, prints, shipping, and major West Yost reproduction efforts, as well as Engineering Supplies, etc. will be billed at actual cost plus 15%.
- The Federal Mileage Rate will be used for mileage charges and will be based on the Federal Mileage Rate applicable to when the mileage costs were incurred. Travel other than mileage will be billed at cost.
- Subconsultants will be billed at actual cost plus 10%.
- Expert witness, research, technical review, analysis, preparation and meetings billed at 150% of standard hourly rates. Expert witness testimony and depositions billed at 200% of standard hourly rates.
- A Finance Charge of 1.5% per month (an Annual Rate of 18%) on the unpaid balance will be added to invoice amounts if not paid within 45 days from the date of the invoice.

2022 Billing Rate Schedule

(Effective January 1, 2022 through December 31, 2022)*



Equipment Charges

EQUIPMENT	BILLING RATES
2" Purge Pump & Control Box	\$270 / day
Aquacalc / Pygmy or AA Flow Meter	\$28 / day
Emergency SCADA System	\$35 / day
Gas Detector	\$80 / day
Generator	\$39 / day
Hydrant Pressure Gauge	\$10 / day
Hydrant Pressure Recorder, Impulse (Transient)	\$55 / day
Hydrant Pressure Recorder, Standard	\$40 / day
Low Flow Pump Controller	\$75 / day
Powers Water Level Meter	\$32 / day
Precision Water Level Meter	\$19 / day
Stainless Steel Wire per foot	\$0.03 / day
Storage Tank	\$15 / day
Sump Pump	\$24 / day
Transducer Components (per installation)	\$23 / day
Trimble GPS – Geo 7x	\$220 / day
Tube Length Counter	\$22 / day
Turbidity Meter	\$22 / day
Vehicle	\$10 / day
Water Flow Probe Meter	\$20 / day
Water Quality Meter	\$27 / day
Water Quality Multimeter	\$185 / day
Well Sounder	\$30 / day

Attachment B

Proposed Project Schedule

