E Scope of Work

Understanding/Approach

The City of Fort Bragg (City), located on California's Mendocino Coast in Mendocino County, owns and operates a water distribution system that provides potable water service to approximately 7,000 residents through roughly 3,000 service connections (2,700 residential and 300 commercial/industrial).

The City receives water from three main sources: Newman Gulch, Waterfall Gulch, and the Noyo River. But tidal influence in the late summer causes the level of salination in the Noyo river to rise. The City has a small desalination plant that has been operational since 2021 to treat the brackish water before discharging it to raw water ponds where it is then sent to the City's water treatment plant for finished water treatment. A rough water system schematic is shown on Figure E-1.

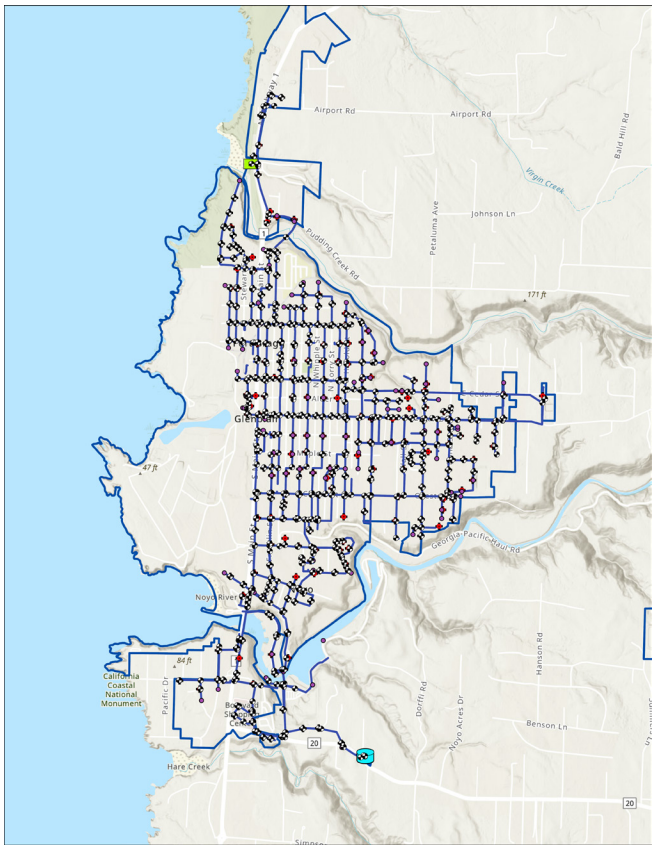


Figure E-1. *City of Fort Bragg Water System*

The City's water distribution system contains four water tanks, three located at the water treatment plant that primarily gravity supply. The East Fort Bragg Pressure Zone (EFBPZ) contains elevations that are too high to be served via the gravity system and is served by a pump station located on Willow Street.

The City's last water master plan was finalized in April 1986, approximately 36 years ago, and was based on 1980 General Plan data that projected development through the year 2000. Many of the recommendations from the 1986 plan have been implemented.

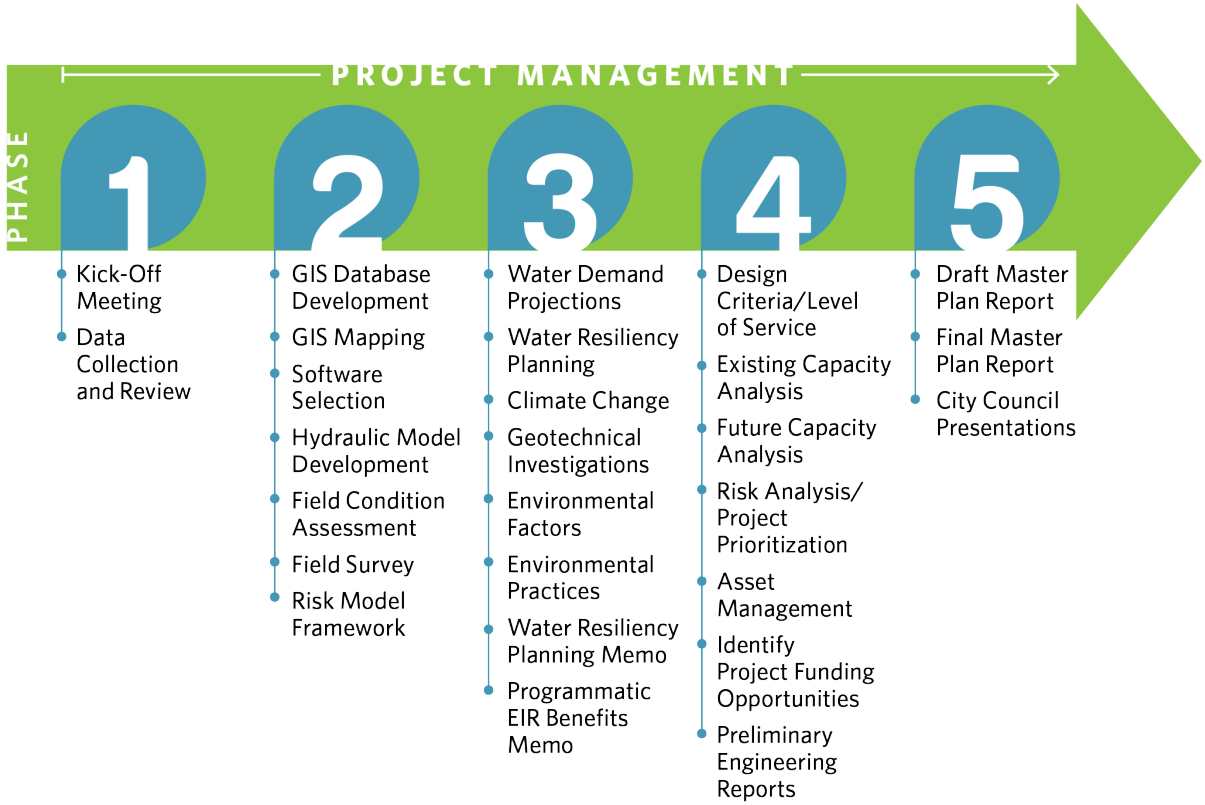
It is important to note that the City is located in an area of potential seismic activity and if the Pudding Creek or Noyo River Bridges are damaged and become unusable, evacuation routes would be cut off and there is a high probability that water infrastructure near these bridges could fail. For this reason, addressing water system risk and resiliency will be a key component of the water system master plan.

We understand that city would like to investigate other issues which include:

1. Identifying distribution system dead-ends so that they may be looped back into the system.
2. Locating shallow pipes which may be prone to damage from surface activity.
3. Investigating climate change implications for low lying areas in the harbor area.
4. Identifying water mains which cross private properties, creating difficulties in accessing them. Relocation shall be prioritized for pipes combined with shallow coverage.
5. Approximately 1/3 of the city's service area is industrial area, which may be re-zoned for development. The city would like to plan for expansion in these areas.

Recognizing the need to update the water master plan based on community changes, economic transition, resiliency, and new technology related to water system planning, the City is seeking to retain

Figure E-2. *An example multi-step framework can improve overall master planning efficiency for the City.*



the services of an Engineering Consultant to develop a comprehensive water system master plan that provides a roadmap for the City to address existing and future system needs necessary to provide adequate water service to its customers well into the future.

Our project approach relies heavily upon leveraging our project team's significant experience on similar water planning projects combined with your team's institutional knowledge and understanding of your systems needs and overall challenges. In our experience, successful projects rely on a partnership between Consultant and Client, leveraging your local experience with our national experience. Project status meetings combined with meetings following key task deliverables will allow the project team to meet the City's expectations for depth and breadth of the analysis as well as stay informed throughout the planning process and be involved in key decisions so there are no "surprises" when the report is delivered.

Our approach also relies heavily on "actionable results." Too often, master plans are delivered in a "static" format and tend to "sit on the shelf" with little or no implementation. Our implementation-focused approach, described in detail in the following sections, will provide the City with actionable improvements that can be implemented based upon a design "trigger." We also use Power BI dashboards and rely heavily on GIS integration to confirm our plans can be updated efficiently to react with changing external factors. Our detailed project information sheets and 30% design approach will provide adequate detail to allow key recommended projects to seamlessly transition from planning to design.

Details of our understanding and approach, organized by the tasks outlined in the City's RFP, are provided below.

We understand the City has specific goals desired for the outcomes of this project, as reflected in the overall RFP. Our experience with projects in this nature suggest that tasks tend to shift as well as goals over the duration of the project. The strength of our team is the ability to react and adjust to deliver a plan that meets your goals and objectives within the desired budget.

Approach and Work Plan

We have detailed our approach and scope of work in the following sections. We have organized the scope based on the four major tasks identified in the City's RFP and in Figure E-2 on page E-02.

We assume that if selected, there would be an opportunity to refine and adjust the scope, schedule, and budget prior to award of contract services.

Task 1 – Master Plan

At the start of the project, it is crucial to get organized and gather the necessary data to get our team up-to-speed and quickly moving ahead in coordination with yours. With the numerous individuals involved in this process, we need to ensure that we streamline our efforts to reduce the impact on your team. Prior to our kickoff meeting, we will utilize an interactive tracking tool to assemble a list of data needs that can be used to track our requests. Of course, we will establish and coordinate a protocol that is workable for transfers of files, both large and small, that is convenient and secure.

Once our team has reviewed and analyzed your data, we will be ready to conduct a virtual or in-person meeting (as appropriate) to kick off the project. The objectives of this meeting are to establish the technical and management teams for the project, introduce the teams and stakeholders to the project and how it will be executed, discuss expectations and critical success factors, and review the schedule and next steps. Because you will have received our data requests prior to this meeting, we will also be able to use this meeting to go over our data requests while we have our technical specialists available and ready to engage directly with your team. This effort will utilize our time effectively and allow us to verify our understanding and information, while giving each of our teams the opportunity to ask follow-up questions, provide crucial understanding and details to fill potential data gaps, and determine direction to fill needed information quickly and efficiently.

The overall goal of Task 1 is to review existing data to gain a clear understanding of the system and then develop a draft and final master plan report, based on the results and findings of Tasks 2 through 4.

Advantages & Potential Analyses That Come With a Comprehensive and Accurate Water Distribution System GIS

- Prioritized maintenance and CIP planning
- Risk scoring (consequence & likelihood of failure)
- Strategic system renewal and deterioration forecasting
- Easier coordination with other utilities
- Establish level of service goals and track system performance

Key sub-tasks for Task 1 include:

1.a. Project Management/Meetings

vi. Kickoff Meeting (1)
vii. Project Meetings (12)
viii. City Council Meetings (3)

1.b. Data Collection and Review

1.c. Master Plan Report

Task 1 Deliverables:

- Meeting agendas/meeting minutes for Kick Off Meeting and Project Meetings
- Draft Master Plan Report
- Presentation for up to three (3) City Council Meetings
- Final Master Plan Report in both digital and hard copy (3 bound) format

Task 2 – Mapping and Modeling

The mapping and modeling task includes evaluating the City's existing mapping resources, recommending an appropriate software system for hydraulic modeling, and performing field work, as necessary to support an accurate water system GIS database.

The mapping and modeling task will be a critical component to the success of the water master plan project. The development of accurate and reliable water system data that will feed into a water system hydraulic model to support the capacity analysis, risk analysis, and subsequent capital project planning is a

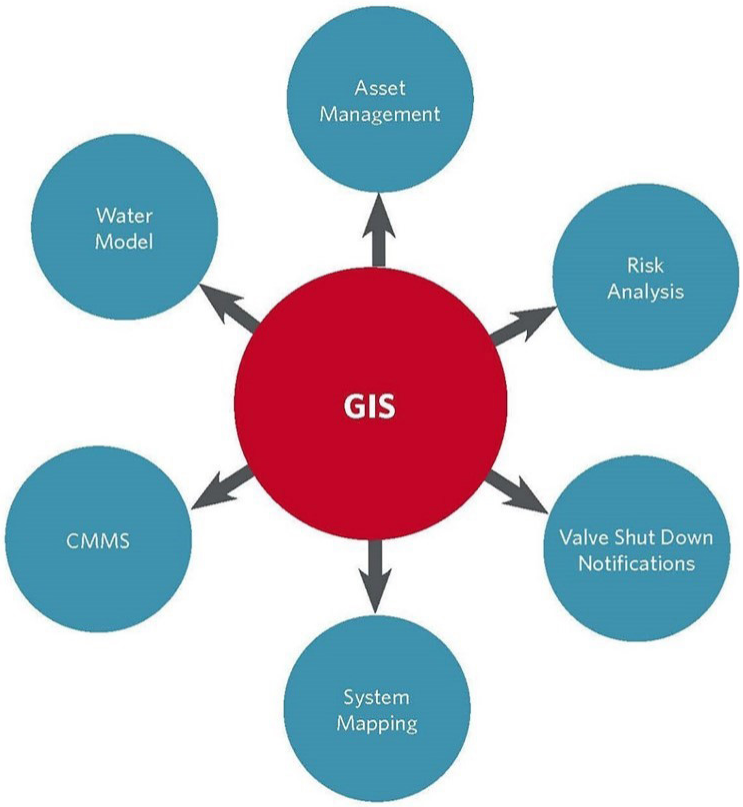


Figure E-3. *Focusing our efforts on GIS data development gives the City a tool to not only support this project, but also a number of future business needs.*

key component. The City currently has water system information housed in three unique sources that are currently not integrated:

- The WaterCAD (now called WaterGEMS) water model, updated in 2019, was originally developed based on the City's AutoCAD maps, supplemented with field survey data.
- The AutoCAD maps contain the current up-to-date and accurate information pertaining to the water distribution system.
- The City has a water system GIS, but it is not heavily used and was based on the AutoCAD maps described above.

This task presents an opportunity for the City to develop a central data repository for their water system data that will support the update/ and development of a water system hydraulic model.

GIS has become an important component to utility system planning in recent years. Our approach to utility planning is to leverage GIS data so that it can be used for your business needs beyond the limits of the specific project we are working on. This project presents a great opportunity for the City to start developing a GIS system not only for use on this project, but for other uses beyond the scope of this project. Our approach utilizes the open architecture format of GIS to support a number of future business needs for the City.

Our approach to development of GIS data relies heavily on the fact that our clients have limited resources and budgets. Therefore, our solutions are highly "scalable" and not all data has to be developed at once or developed with perfect precision. We design our databases so that a level of accuracy/confidence is established. For example, a level 1 may include data based upon a set of assumptions, whereas a level 4 is data that has been field verified and surveyed to sub inch accuracy. This allows the City to start with a base GIS framework that can be continuously improved as new data is acquired and added.

We will focus our GIS data development efforts on the data required to support this master plan but in such a manner that the accuracy can be improved over time and future areas can easily be added.

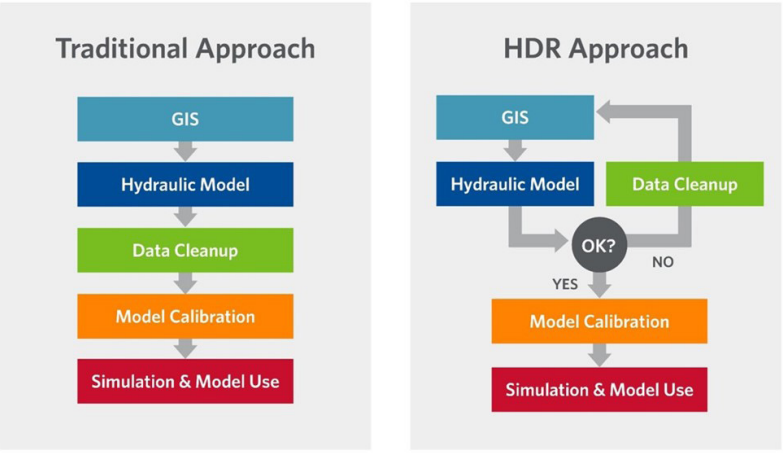


Figure E-4. *Traditional approaches use the hydraulic modeling environment for data manipulation, which can create disconnects between the model database and the GIS database. HDR's approach uses the GIS environment for model input data creation and update to avoid conflicts between the GIS data and the hydraulic model.*

Once the GIS database has been developed, we will use that data to develop a water system hydraulic model. Our experience with hydraulic modeling is that when a model hasn't been updated recently (in this case since 2019) and a new accurate GIS database is available, it is more efficient to create a new model linked to the updated GIS database. We are recommending that we create a new model for the City in either WaterGEMS (the latest version of WaterCAD), which is a Bentley product, or InfoWater, which is an Innovyze product. Both software solutions use the EPANet hydraulic engine, so results will be similar and preference comes down to City preference, cost, and available features. We will prepare a software selection technical memorandum as part of this task. After the GIS data is developed for the water system, we will use that data to form the basis of our hydraulic model. Traditional approaches use the hydraulic modeling environment for data manipulation, which can create disconnects between the model database and GIS database. HDR has developed a proven project approach to GIS integration, shown in Figure E-3 above, that uses the GIS environment for model input data creation to accomplish a number of objectives:

- We can avoid conflicts between the GIS data and the hydraulic model.
- We can use the hydraulic model to QA/QC the GIS data resulting in a more accurate GIS database.
- It becomes easier to update the model in the future as data is added to or changed within the GIS database.

Task 2 also includes fieldwork including surveying, geotechnical evaluations, and potholing required to support the water system mapping. At the master planning stage, we typically let the preliminary results of the water system modeling, and risk analysis drive the need to perform fieldwork. That way we can focus our efforts on high risk assets and areas that do not make sense from a modeling and calibration standpoint. Our approach to data accuracy will clearly document the confidence level in each facility and we can recommend a plan for collecting data for this master plan effort as well as prioritizing future data collection. We have added a contingency for field survey and potholing.

Table E-1. *Consequences of Failure and Likelihood of Failure*

Considerations for LoF	Considerations for CoF
Installation Date	Size of Pipe
Age and Material	Pressure
Shallow Pipes	Land Use
Seismic	Proximity to Critical Infrastructure and Critical Customers Out of Service
Break History	Near Water Bodies
Soil Type	Potential Environmental Impact

A final component to Task 2 will be the establishment of Risk IDs for water main facilities and risk criteria for use in the risk analysis which will be performed in Task 4. Assigning Risk IDs allow us to group facilities based on individual construction project characteristics (e.g., year of installation, material, leak history). The development of consequence of failure as shown in Table E-1 (CoF) and likelihood of failure (LoF) evaluation criteria will allow us to perform a risk analysis that evaluates how likely a facility is to fail and if it does fail, what is the overall consequence of not being able to use the failed asset.

Key sub-tasks for Task 2 include:

2.a. GIS Database Development

2.b. GIS Mapping

2.c. Software Selection

2.d. Hydraulic Model Development

2.e Field Condition Assessment

2.f. Field Survey

2.g. Risk Model – Risk Analysis to be performed in Task 4

i. Establish Risk IDs
ii. Establish Risk Criteria (Consequence of Failure/Likelihood of Failure)

Task 2 Deliverables:

- Hydraulic Model Software selection technical memorandum
- GIS database development and system mapping to include:

- Mains
- Valves
- Hydrants
- Meter laterals
- Pumps
- Appurtenances
- Pressure Zone Boundaries
- Field Condition Assessment Data

- Field data collection plan for master plan and for future data collection. We have assumed $150,000 of field collection services to support Task 2.
- Risk model development technical memorandum (definition of criteria). Note the Risk Analysis is completed in Task 4.

Task 3 – Analyzing Environmental Variables

Water Demand Projections

The focus of this task is the development of long range water demand projections and water efficiency strategies and the assessment and impact of applicable climate change related conditions.

Water use trends have been decreasing over the last several years. Determining how much of this decrease will be permanent is a challenging exercise in risk assessment. Accurately projecting future demands from your historical trends, including new development, and modeling them correctly, is essential to right sizing your system and optimizing when and where to spend your capital funds. The transformation in demands has altered traditional master plan thinking throughout the state, with a focus shifting away from system capacity expansion towards system reliability and asset management planning. Our experience tells us that your water system is in a similar situation.

We will use historic billing data to analyze past usage patterns and to establish an appropriate baseline for your existing system demand scenarios. However, the baseline developed may not reflect the current or previous year, based on events (e.g., drought, demand conservation, or unprecedented economic event) that impacted the baseline or the current or previous year. We will also analyze the City's billing data to develop minimum, average, and maximum day demand peaking factors for use in updating the model.

We will look at land uses within the City's service area and sort by service pressure zone, looking at both existing and planned land use designations within the approved General Plan. The growth data, together with data from your billing system sorted by pressure zone, will be utilized to analyze and project demands and peaking factors at the Pressure Zone level, providing greater accuracy for the forecast and better demand data for use in the hydraulic model. In particular, we will look at the following potential growth sites:

- The Georgia Pacific (GP) Mill site
- North Fort Bragg industrial water line extension from Pudding Creek to the edge of the City Limits (Note: this project is planned for 2022/2023)
- Future development/annexation within the Harbor areas
- One additional future annexation area, as defined in the current LAFCO Municipal Services Review (most likely the Fort Bragg area)

Resiliency Planning Elements

Cities, agencies, communities, businesses, and individuals are facing new and intensifying challenges from extreme weather events, increasing air temperatures, and increased precipitation variability as a result of climate change. The City of Fort Bragg has chosen to be proactive in response to these changes as part of their strategic planning. This step-by-step analysis utilizes historic climate trends to set the baseline for understanding projected future climate trends in air temperatures and precipitation so that the City's risk/vulnerabilities related to water demand can be correlated to those that are anticipated to change at future time scales due to climate change.

HDR's team of three atmospheric scientists have over 65+ years of combined experience in climate and weather hazard analysis for water management. The following approach is designed to provide the

necessary decision support that will aid in prioritizing resilient actions to the environmental threats posed by the varying climate

Communities that develop strategic plans for climate resilience will not only reduce service failures, improve financial efficiencies, and reduce liability, they will make their cities and towns more economically attractive to investment through their resiliency efforts. The cost of not taking action to mitigate climate hazards goes well beyond just those associated with the hazards themselves. In previous HDR studies, we have been able to conclusively prove that the benefit-to-cost ratio of resilient actions is a ratio of 6-to-1 for every dollar spent.

HDR has performed climate change risk and vulnerability assessments across a variety of infrastructure types and scale, including community, system, and site-level. We will use the climate investigations developed for the City in Task 3b as a starting place for a system-based climate resilience investigation as part of this project.

Through these analyses, HDR proposes to utilize the product of threat likelihood (probability) and the consequences of failure to produce a high level understanding of system risk to climate threats now and into the future (i.e. 2035, 2050, 2070, 2100). Considerations will be made for infrastructure criticality and community socio-economic goals. A prioritization schema will be developed to provide decision support for resilient actions.

For the geotechnical desktop assessment, HDR will review publicly available information on historic seismic data, review published flood maps, and records of historical pipe repairs. The desktop assessment will help identify areas of concern related to geotechnically sensitive areas and environmental factors. Additional testing may be performed for quantitative analysis of soils. Soils testing is not included in HDR's scope.

Environmental Sciences

HDR will review the options to prepare Programmatic California Environmental Quality Act (CEQA) document(s) for the City's utility master plans and CIP Program. CEQA allows for the preparation of programmatic Environmental Impact Reports (EIR) when a project includes a series of related actions that can be characterized as one large project and should be looked at as a whole. The benefits of such documents are that they allow a examination of a project and promote "tiering" when later activities within the program are undertaken.

The use of tiering can expedite environmental review by eliminating repetitive analysis of issues and potential impacts adequately addressed in the program EIR. Tiering allows for the preparation of focused subsequent environmental documents once the appropriate level of project information and design is available. Typically these benefits are realized through time and money savings. Furthermore, preparing a comprehensive programmatic EIR for such plans often reduces risks to jurisdictions regarding timing project by project environmental reviews. By establishing overarching strategies and mitigation options for similar project types, the CEQA compliance process can be streamlined. HDR will prepare a memo that identifies the benefits of preparing Programmatic EIR(s) for the City utility master plans and CIP Program. The memo will also outline the risks associated with preparation of project by project documents vs preparation of a Programmatic EIR. Estimated costs associated with preparation of individual CEQA documents, including the array of different document types (e.g., exemptions, initial studies, mitigated negative declarations, EIRs), compared to the preparation of a programmatic EIR and tiered, focused subsequent documents will also be provided in the memo. HDR will prepare a Draft Memo for the City's review. Upon receipt of the City's comments, HDR will incorporate the City's comments and will prepare and submit a Final Memo.

Key sub-tasks for Task 3 include:

3.a. Water Demand Projections

i. GP Mill Site
ii. North Fort Bragg Industrial Water Line
iii. Harbor Areas
iv. One additional future annexation area

3.b. Water Resiliency Planning – Review General Plan (inland and coastal) Element 7

i. Climate Change: Impacts and Projections
ii. Climate Change: Risk and Vulnerability Assessments
ii. Geotechnical Desktop Assessment

1. Seismic
2. Landslides
3. Slope instability
4. Tsunami
5. Flood
6. Fire

iii. Environmental Factors
7. Soil Corrosiveness
8. PH
9. Ground Water

iv. Environmental Practices
10. Water Efficiency
11. Conservation
12. Working with local watershed groups to capitalize on the protection of sensitive fish and other members of the native river community

3.c. Technical Report Preparation

3.d. Cost/Benefits of Preparing a Programmatic EIR Memo

Task 3 – Deliverables

- Technical Report including analysis of future water demand, resiliency planning, and consideration of environmental factors. The report should recommend strategies for Climate Change and other disaster preparedness, address water efficiency and conservation in keeping with environmental constructs and ethical practices, discuss new, innovative, or emerging pipe/water system technologies.
- Prepare a memo analyzing the cost/benefits of preparing a Programmatic EIR for City utility master plans and proposed Capital Improvement Projects (CIP) and risks of the timing of the environmental review on a project-by-project basis without a comprehensive environmental document.

Task 4 – Capital Project Planning

Task 4 includes the bulk of the analysis work related to the water system master plan and we will use the model and findings from previous tasks to identify water system improvements necessary to provide adequate levels of service for both existing and future needs. Recommended system improvements will be prioritized based on a Risk Analysis and associated risk model that assigned a Business Risk Exposure (BRE) score to each asset to confirm that resources are spent wisely on high risk assets. Recognizing that not all assets are created equal, we use a risk based approach to prioritizing assets for repair, rehabilitation, and replacement. High Lof/high CoF assets rise to the top of the list, while low LoF/Low CoF are at the bottom of the list. See figure below.

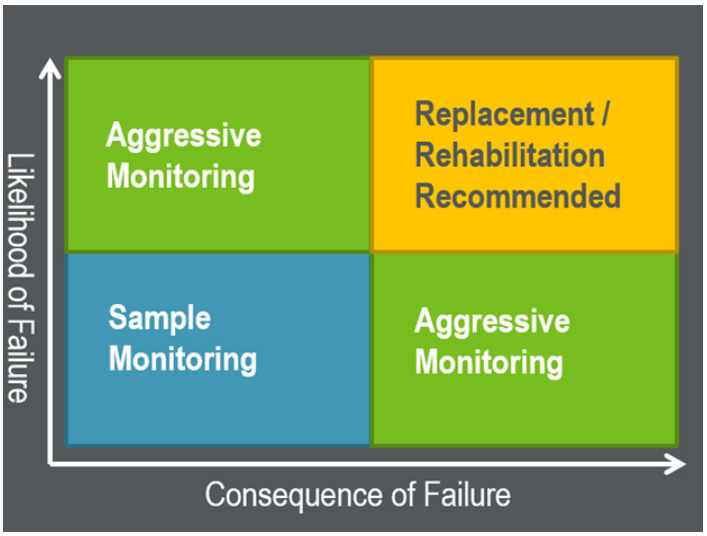


Figure E-5. *Consequences of Failure and Likelihood of Failure*

One of the primary strategies needed to successfully develop a comprehensive CIP that the City can confidently rely on year after year is to be able to provide the right balance that considers replacing aging infrastructure as well as meeting growth and redevelopment, capacity, and reliability needs. Developing a repeatable process that can be updated internally by staff enables the City to efficiently respond to and adapt the CIP whenever capital planning needs change, without having to rely on outside resources. This approach can leverage the City's Asset Management Program recommendations, developed as part of this task, to align the CIP with the recommended performance metrics and service levels.

Through this project work, the City will be able to develop a repeatable, data-driven asset management project to support maintenance decisions and capital planning. The foundation of this will be development of a complete and reliable asset registry, an understanding of the overall condition of the infrastructure, and an assessment of capacity issues and reliability risks from the hydraulic modeling. These data sets can be leveraged to make defendable

capital decisions and focus maintenance activities to enhance the City's efforts and capital dollars.

This can be achieved through alignment of these analyses with the City's priorities and key performance metrics. HDR will work with the City to develop or enhance level of service metrics and establish a process that the City can follow to align risk modeling, condition assessments and modeling results with key levels of service in order drive priorities. This will result in a repeatable and defensible process that can easily be explained and justified to stakeholders and decision makers.

HDR will conduct workshops to work with the City to define level of service goals and key performance metrics. These will be factored into the risk assessment and capital planning effort for prioritization and scheduling of capital projects. HDR will document this process so that they City can continue to update their capital improvement program as new data is obtained and as needs change over time.

We have found that a distinct advantage of an Asset Management Program for our clients is the shift from "reactive" or unplanned to "proactive" or planned maintenance activities results in a significant cost savings.

Reactive Vs. Proactive

Our team is committed to providing the City actionable improvements. Too often projects are identified that cannot actually be implemented. This disconnect is commonly the result of lack of detail on the triggers and drivers for identified projects, a disconnect with available funding, or an inability to finish projects due to emergency repairs of aging assets. Figure E-6 provides an illustration of this problem.

We have had a high level of success with detailed information sheets to provide adequate detail for recommended projects. While it is necessary to forecast timing for projects to assist with financial planning, assumptions related to population and demand growth that may trigger these improvements inevitably change over time, especially for long-range improvements. Therefore, it is important to not only forecast timing of a recommended improvement, but also to identify the demand condition that triggers the improvement. These project information sheets contain necessary detail to support environmental review and permitting process and support obtaining project funding from various State and Federal sources.

This leads to another key component of Task 4, the identification of project funding opportunities and funding streams Our funding strategy roadmap will identify ideas to make the most of available funding while lessening federal compliance requirements. This will help reduce overall project costs and administrative requirements. We have successfully helped obtain SRF funding for clients across the country, including the City of Santa Cruz and Sacramento Regional County Sanitation District.

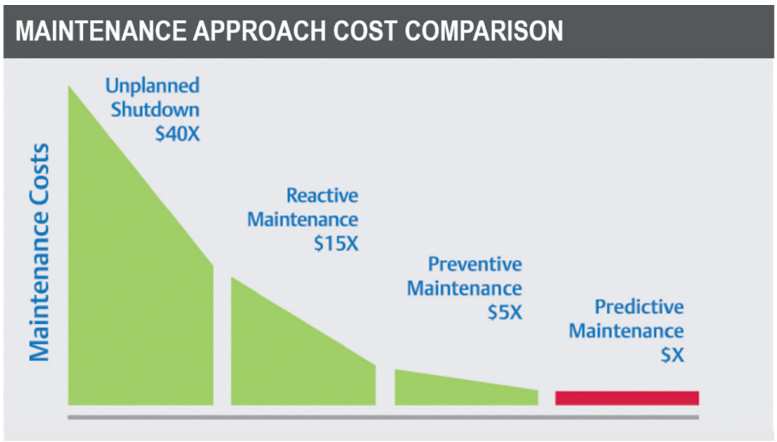


Figure E-6. *Illustration of the impact of unplanned or reactive maintenance activities.*

Beyond the SRF process, our team has expertise in each of the required environmental considerations, working relationships with applicable resource agencies, and the resources to execute the required environmental analysis and documentation. Our approach will provide the City with a transparent process and efficient execution of compliance actions. Potential funding sources that will be explored include:

- State Revolving Fund (SRF)
- Water Infrastructure and Finance Innovation Act (WIFIA)

Our recent experience with WIFIA has led to $3.3 billion in financing to support $6.8 billion of infrastructure investment for our Clients (see Figure E-7 on page E-11).

Key sub-tasks for Task 4 include:

4.a. Existing Capacity Analysis

4.b. Future Capacity Analysis

4.c. Risk Analysis/Project Prioritization

4.d. Asset Management

i. Analyze existing asset management practices for the water distribution system

ii. Prioritize future asset management procedures (tracking, evaluating, and replacing aging infrastructure).

4.e. Identify project funding opportunities

4.f. Project Practicability Report

4.g. Preliminary Engineering Reports (30% Design) for up to three projects

Task 4 Deliverables:

- Technical Memorandum (TM) summarizing results and findings of the capacity analysis including proposed pipeline replacement projects. Recommended project will consider emerging technology.
- Technical Memorandum summarizing the results of the risk based analysis including likelihood of failure versus consequence of failure analysis to develop risk scores for each water asset.
- Based on the results of the capacity evaluation and the risk evaluation, a prioritized list of replacement, repair, and rehabilitation projects will be developed that include an evaluation of the feasibility of implementation and funding options.
- Preliminary Engineering Reports will be developed for recommended projects that contain adequate detail to support the environmental and funding process. Reports will include:
  - Schedule
  - Cost
  - Mapping
  - Detailed Project Descriptions
  - Design Trigger
  - Funding Sources
  - Grant Funding Analysis
  - Project Priority Ranking
  - Environmental and Permitting Requirements to Support Funding

Alternate Tasks

A.1 - Preparation of CEQA/NEPA determinations and associated studies needed for grant applications.

HDR has supported several jurisdictions with the preparation of environmental constraints analyses, initial environmental reviews, technical studies, and identification of CEQA/NEPA documentation strategies for grant applications. Often, early environmental review as part of the grant application process can be beneficial for scoring purposes as well as for demonstrating the project's applicability for the grant program and ultimately leads to successful grant award. HDR has a wide range of technical environmental experts that can conduct air quality, biological resources, climate, cultural resources, energy, hazardous waste, hydrologic, traffic, visual, and wildfire assessments to support grant applications. HDR has successfully prepared several CEQA-Plus documents as part of the Clean Water State Revolving Fund Grant Process. HDR is very familiar with the CEQA-Plus requirements and has local experts to address the federal cross-cutting regulations. HDR is also intricately familiar with federal grant programs, specifically the FEMA Hazard Mitigation Grant Program. HDR has NEPA experts locally in Northern California as well as across the country to assist with NEPA documentation in support of federal grant applications. HDR can assist with preparation of CEQA/NEPA documents, conducting technical studies, and early environmental reviews for the City as part of grant application processes. HDR can work with the City to define the environmental review needs as part of the grants being pursued. Once the environmental review needs are defined, HDR will provide a separate scope of work and fee.

A.2 - Preparation of Programmatic EIR for CIP projects associated with Utility Master Plans.

As described above, under Task 2, there are benefits to prepare a programmatic EIR (PEIR) for CIP Projects associated with Utility Master Plans. HDR has prepared PEIRs for several jurisdictions successfully. Within the PEIRs that we have prepared we have typically described the program as a whole, identified the list of projects, analyzed the full range of projects included in the program, and also

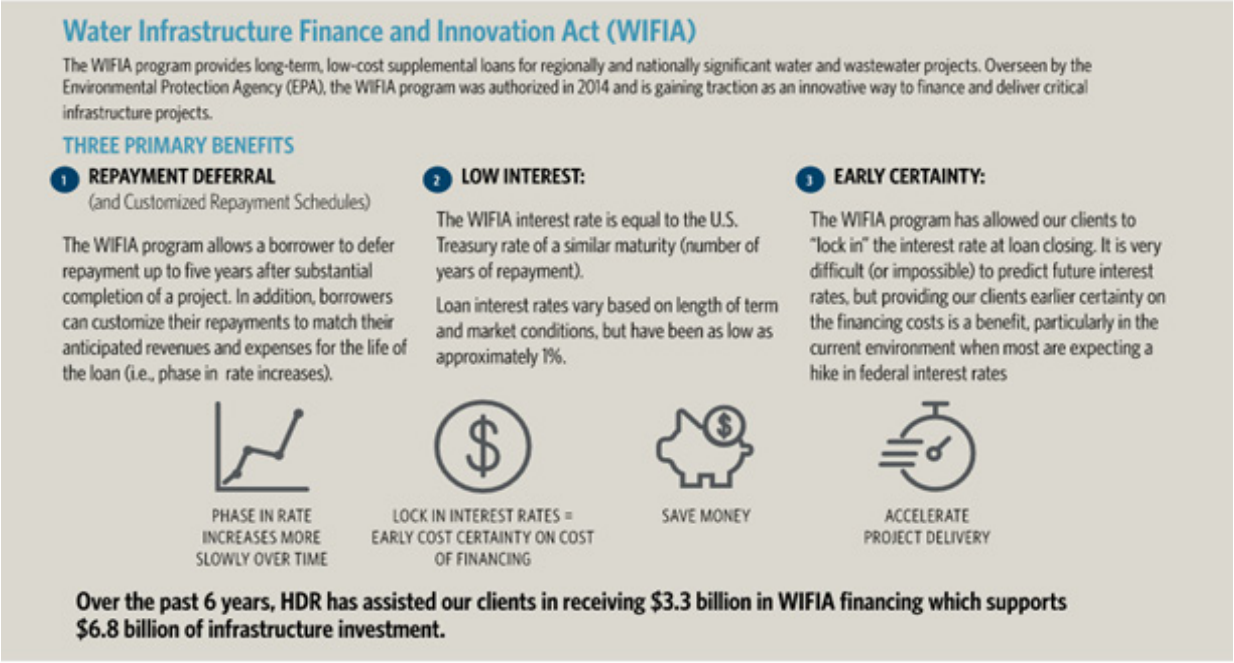


Figure E-7. *WIFIA Infrastructure Financing*

evaluated at a project-level of analysis those projects that are more defined at the time of preparation of the PEIR. This allows for additional efficiencies and reduces the number of tiered and subsequent CEQA documents that are necessary to finish CEQA compliance, ultimately saving time and money. HDR would recommend this approach for the City's PEIR if there are CIP projects that can be defined at a low level of detail and still have full analysis of potential environmental impacts, while other CIP projects that may be in the early planning phase and have a higher level of detail to meet CEQA review requirements. This programmatic/project-level approach informs a whole decision-making process under CEQA with necessary legal sufficiency; it also informs better design in the next phase of work. HDR can work with the City to define the appropriate approach for the CIP Program PEIR. The agreed-upon approach will inform the scope of work for the PEIR. Therefore, if the City elects to prepare a PEIR for the CIP Program, HDR will provide a separate scope of work and fee.