

COUNCIL MEMBERS:

SHAWN	DON	SUZANNE	GREGORY	JIM	REBECCA	CHRIS
BARIGAR	HALL	HAWKINS	LANTING	MUNN, JR.	MILLS SOJKA	TALKINGTON
	<i>Vice Mayor</i>		<i>Mayor</i>			



AGENDA
Meeting of the Twin Falls City Council
October 8, 2012
City Council Chambers
305 3rd Avenue East - Twin Falls, Idaho

5:00 P.M.

PLEDGE OF ALLEGIANCE TO THE FLAG
CONFIRMATION OF QUORUM
INTRODUCTION OF STAFF
CONSIDERATION OF THE AMENDMENTS TO THE AGENDA:

PROCLAMATIONS: UNITED WAY OF SOUTH CENTRAL IDAHO KICK OFF DAY

AGENDA ITEMS	Purpose	By:
I. <u>CONSENT CALENDAR:</u> 1. Consideration of a request to approve the accounts payable for October 2 – 8, 2012. 2. Consideration of a request to approve the October 1, 2012, City Council Minutes.	<u>Action</u>	<u>Staff Report</u> Sharon Bryan L. Sanchez
II. <u>ITEMS FOR CONSIDERATION:</u> 1. Consideration of a request to enter into an agreement with CH2M Hill for a Facility Plan Amendment to the Twin Falls Wastewater Treatment Facility. 2. Public input and/or items from the City Manager and City Council.	Action	Troy Vitek
III. <u>ADVISORY BOARD REPORTS/ANNOUNCEMENTS:</u>		
IV. <u>PUBLIC HEARINGS:</u> 6:00 - None		
V. <u>ADJOURNMENT:</u> EXECUTIVE SESSION 67-2345(b) – To consider the evaluation, dismissal or disciplining of, or to hear complaints or charges brought against, a public officer, employee, staff member or individual agent, or public school student.		

**Any person(s) needing special accommodations to participate in the above noticed meeting should contact Leila Sanchez at (208) 735-7287 at least two working days before the meeting.*

Twin Falls City Council-Public Hearing Procedures for Zoning Requests

1. Prior to opening the first Public Hearing of the session, the Mayor shall review the public hearing procedures.
 2. Individuals wishing to testify or speak before the City Council shall wait to be recognized by the Mayor, approach the microphone/podium, state their name and address, then proceed with their comments. Following their statements, they shall write their name and address on the record sheet(s) provided by the City Clerk. The City Clerk shall make an audio recording of the Public Hearing.
 3. The Applicant, or the spokesperson for the Applicant, will make a presentation on the application/request (request). No changes to the request may be made by the applicant after the publication of the Notice of Public Hearing. The presentation should include the following:
 - A complete explanation and description of the request.
 - Why the request is being made.
 - Location of the Property.
 - Impacts on the surrounding properties and efforts to mitigate those impacts.Applicant is limited to 15 minutes, unless a written request for additional time is received, at least 72 hours prior to the hearing, and granted by the Mayor.
 4. A City Staff Report shall summarize the application and history of the request.
 - The City Council may ask questions of staff or the applicant pertaining to the request.
 5. The general public will then be given the opportunity to provide their testimony regarding the request. The Mayor may limit public testimony to no less than two minutes per person.
 - Five or more individuals, having received personal public notice of the application under consideration, may select by written petition, a spokesperson. The written petition must be received at least 72 hours prior to the hearing and must be granted by the mayor. The spokesperson shall be limited to 15 minutes.
 - Written comments, including e-mail, shall be either read into the record or displayed to the public on the overhead projector.
 - Following the Public Testimony, the applicant is permitted five (5) minutes to respond to Public Testimony.
 6. Following the Public Testimony and Applicant's response, the hearing shall continue. The City Council, as recognized by the Mayor, shall be allowed to question the Applicant, Staff or anyone who has testified. The Mayor may again establish time limits.
 7. The Mayor shall close the Public Hearing. The City Council shall deliberate on the request. Deliberations and decisions shall be based upon the information and testimony provided during the Public Hearing. Once the Public Hearing is closed, additional testimony from the staff, applicant or public is not allowed. Legal or procedural questions may be directed to the City Attorney.
- * Any person not conforming to the above rules may be prohibited from speaking. Persons refusing to comply with such prohibitions may be asked to leave the hearing and, thereafter removed from the room by order of the Mayor.

*Office of the Mayor
City of Twin Falls, Idaho*

Proclamation



UNITED WAY OF SOUTH CENTRAL IDAHO KICK OFF DAY

WHEREAS, the City of Twin Falls and its elected officials recognize the efforts of the United Way of South Central Idaho and its hundreds of volunteers; and

WHEREAS, the people of Twin Falls are the benefactors of the thirty one (31) human service agency programs funded by the United Way of South Central Idaho in 2012; and

WHEREAS, the 2012 official United Way of South Central Idaho Campaign Drive will kick off on Monday October 8th; and

WHEREAS, the United Way of South Central Idaho recognizes and appreciates the many contributions of volunteer hours and dollars in making our area a better place to live and work; and

WHEREAS, the United Way of South Central Idaho's mission is "Uniting People and Resources for a Stronger Community."

NOW, THEREFORE, BE IT RESOLVED, that We, the City Council of Twin Falls Idaho, do hereby proclaim October 8, 2012, as "UNITED WAY OF SOUTH CENTRAL IDAHO KICK OFF DAY" in Twin Falls, and urge all citizens to support activities and efforts of the United Way of South Central Idaho.

In witness whereof I have hereunto set my hand and caused this seal to be affixed.

Mayor Gregory Lanting

Deputy City Clerk Leila A. Sanchez

Date: October 8, 2012



Date: Monday, October 8, 2012
To: Honorable Mayor and City Council
From: Troy Vitek, Assistant City Engineer

Request:

Consideration of a request to enter into an agreement with CH2MHill for a Facility Plan Amendment to the Twin Falls Wastewater Treatment Facility.

Time Estimate:

The staff presentation will take approximately 5 minutes.

Background:

In July 2010, CH2M HILL completed a wastewater treatment plant (WWTP) facilities plan amendment for the City of Twin Falls (City). Soon thereafter (September 2010), CH2M HILL completed a technical memorandum (TM) describing near-term rehabilitation projects for the WWTP (i.e., dewatering, UV disinfection, aeration diffusers, and influent screening projects). The information in this TM was used to help secure funding through Judicial Confirmation. This TM updated some of the facilities information in the recent amendment. Since this time, there has been increased growth within the City's service area. A Development Agreement, dated November 3, 2011, has been executed between the City of Twin Falls (City), the Urban Renewal Agency of the City of Twin Falls (URA), and Agro-Farma Idaho, Inc. (A-F). A-F will own and operate a dairy processing facility in Twin Falls, Idaho. This dairy processing plant (Chobani) is currently in construction. The City worked to mitigate this additional capacity requirement within the service area with the following improvements to the City's treatment system: a new aeration blower at the WWTP, clarifier conversion at the WWTP (Intermediate Clarifier to Primary Clarifier 3), and new pretreatment facility (PTF) at the Chobani site. These are all currently being designed and/or constructed. Given the new improvements to the City's treatment system and the potential for future industrial, commercial and residential growth within the service area an amendment to the wastewater facility plan is warranted.

This project will provide an amendment suitable for submittal to and approval by the Department of Environmental Quality (DEQ). Such approval is needed so that the City's WWTP facilities can be expanded and upgraded over time in response to commercial growth, residential growth, and new or expanded industrial sources. Because the likelihood and timing of new growth or new regulatory drivers are difficult to predict, one of the key features of the plan amendment will be to develop specific capacity and regulatory "triggers" that can be used by the City. These triggers will identify influent flows and loads and regulatory issues that necessitate WWTP upgrades or expansions.

Approval Process:

Council authorizing the Staff to execute the contract with CH2MHill.

Budget Impact:

The cost of the amendment to the plan is \$178,093. The budget is \$250,000.

Regulatory Impact:

Approval of this request will allow the facility plan to be amended which is required before additional improvements to the wastewater treatment plant can be expanded and upgraded.

Conclusion:

Staff recommends that the Council approve the request and allow the City Engineer to sign the professional service contract with CH2MHill.

Attachments:

1. City of Twin Falls Wastewater Facility Plan Amendment

TASK ORDER NO. 13

This Task Order is issued pursuant to the Standard Master Agreement for Professional Services dated: January 21, 2010 between City of Twin Falls, ID and CH2M HILL, INC, which is incorporated herein by this reference, with respect to	
City of Twin Falls Wastewater Facility Plan Amendment	("Project")

Specific Services: See Exhibit A (Scope of Work)

Compensation Provisions: Time and expense (raw labor times a multiplier of 3.19) for an amount not to exceed \$178,093, in accordance with Exhibit A (Scope of Work).

Work Schedule: See Exhibit A (Scope of Work)

The Authorized Representatives designated below are authorized to act with respect to the Task Order. Communications between the parties will be between parties and their consultants or subcontractors will be through the Authorized Representatives:	
For the City of Twin Falls	For CH2M HILL
Name: Troy Vitek	Name: Tom Dupuis
Address: P.O. Box 1907 Twin Falls, ID 83303	Address: 322 East Front Street Suite 200 Boise, ID 83702
Telephone: (208) 735-7256	Telephone: (208) 383-6312

This Task Order 13 is effective this: ___ day of October, 2012	
Accepted for CH2M HILL by:	Accepted for Client by:
Name: Mark Bowen	Name: Jacqueline Fields
Signature:	Signature:
Title: Vice President/Area Manager	Title: City Engineer

Scope of Work

**Twin Falls Wastewater Treatment Facility Plan
Amendment Task Order 13**

Prepared for
City of Twin Falls

October 2, 2012

Prepared by
CH2MHILL®

Exhibit A Scope of Work CH2M HILL

City of Twin Falls – Wastewater Treatment Facilities Plan Amendment

Project Understanding and Implementation Strategy

In July 2010, CH2M HILL completed a wastewater treatment plant (WWTP) facilities plan amendment for the City of Twin Falls (City). Soon thereafter (September 2010), CH2M HILL completed a technical memorandum (TM) describing near-term rehabilitation projects for the WWTP (i.e., dewatering, UV disinfection, aeration diffusers, and influent screening projects). The information in this TM was used to help secure funding through Judicial Confirmation. This TM updated some of the facilities information in the recent amendment. Since this time, there has been increased growth within the City's service area. A Development Agreement, dated November 3, 2011, has been executed between the City of Twin Falls (City), the Urban Renewal Agency of the City of Twin Falls (URA), and Agro-Farma Idaho, Inc. (A-F). A-F will own and operate a dairy processing facility in Twin Falls, Idaho. This dairy processing plant (Chobani) is currently in construction. The City worked to address this additional capacity requirement within the service area with the following improvements to the City's treatment system: a new aeration blower at the WWTP, clarifier conversion at the WWTP (Intermediate Clarifier to Primary Clarifier 3), and new pretreatment facility (PTF) at the Chobani site. These are all currently being designed and/or constructed. Given the new improvements to the City's treatment system and the potential for future industrial, commercial and residential growth within the service area an amendment to the wastewater facility plan is warranted.

This project will provide an amendment suitable for submittal to and approval by the Department of Environmental Quality (DEQ). Such approval is needed so that the City's WWTP facilities can be expanded and upgraded over time in response to commercial growth, residential growth, and new or expanded industrial sources. Because the likelihood and timing of new or expanded industrial facilities or new regulatory drivers are difficult to predict, one of the key features of the plan update will be to develop specific capacity and regulatory "triggers" that can be used by the City. These triggers will identify influent flows and loads and regulatory issues that necessitate WWTP upgrades or expansions.

Project Description

This scope of work includes two primary areas of evaluation as follows:

- Amendment to the wastewater treatment facilities plan, including updates of flows and loads estimates, identification of WWTP expansion alternatives, development of capacity and regulatory triggers for expansions or upgrades, and preparation of draft and final amendment reports.
- Preparation of a rate impact study including evaluation of various funding sources, development of a financial plan, and draft and final rate impact TMs.

Scope of Work—Key Assumptions

The following key assumptions were made in the compilation of this scope of work and in estimating level of effort:

1. The duration of the project is anticipated to be from an authorization date of early October 2012 and completion of final reports by March 2013.
2. Workshops and meetings will be held either at the WWTP or in the City's offices in Twin Falls.
3. The State Revolving Fund loan program requires applicants have an approved Environmental Impact Document (EID). This project scope does not include preparation of an EID because the City does not anticipate facilities funding via the SRF program at this time.
4. This scope of services does not include wastewater collection system facilities, only wastewater treatment facilities (including the WWTP and existing PTFs).

Scope of Work – Project Tasks

The critical project phases, along with other critical support responsibilities, are divided into the following major tasks:

- Task 1 – Project Initiation and Management
- Task 2 – Quality Assurance/Quality Control (QA/QC)
- Task 3 – Update Flows and Loads and Develop Capacity Triggers (with TM)
- Task 4 – Update of Regulatory Considerations (with TM)
- Task 5 – Draft and Final Plan Amendment
- Task 6 – Rate Impact Study (with TM)

Each task is described in more detail below.

Task 1 Project Initiation and Management

The purpose of this task is to manage, coordinate and lead CH2M HILL Team's activities and perform administration of the project design services and project quality reviews. CH2M HILL will provide the resources necessary for project initiation and management throughout the project, including:

Subtask 1.1 Prepare Project Execution Plan

The Project Execution Plan (PXP) will be used to guide the direction of the Project Team and will include descriptions of the roles and responsibilities of team members, communications plan, cost and schedule control procedures, document control, change management and other project management requirements. They will also define software standards, graphic standards, file naming conventions and standards and other graphic standards. In addition, the PXP will include a quality management plan, change management plan and a project health and safety plan to apply to CH2M HILL employees working on the project. PXP will be distributed to all team members and stored on the project SharePoint site.

Subtask 1.2 Contract Administration

This task includes activities associated with administration of the contract and coordination with the City. It will include the following:

- Scoping, contract review/execution, and project accounting setup.
- Prepare a Health and Safety Plan for onsite work activities and obtain staff endorsement.
- Supervise and manage CH2M HILL project staff for execution of work tasks.
- Project documentation and coordination.
- Monitor project progress, including work completed, work remaining, budget expended, schedule, estimated cost of work remaining, and estimated cost at completion. Coordinate with and provide periodic updates to the City's Project Manager (assumed at meetings identified below as well as workshops).

- Monitor project activities for potential changes, anticipate changes when possible, and with City's approval, modify project tasks, budgets, and approach.
- Prepare and submit monthly billing with a brief description of the work completed during that billing cycle.
- Manage the quality control review of all work activities and project deliverables. Identify senior technical staff for the various technical disciplines and oversee the adherence to the plan during the execution of the work tasks.

Subtask 1.3 Client/Project Team Meetings

Meetings will be held with the City on a monthly basis to review the status of the performance of this Task Order. These will often be conference calls. CH2M HILL will prepare and distribute minutes of each meeting (with emphasis on Decisions made and Actions/Issues pending – ISSUES MATRIX).

Subtask 1.4 Project Chartering

Chartering is a structured process used to guide the project team (City, CH2M HILL) through defining itself in terms of its purpose, critical success factors, goals, roles and responsibilities, operating guidelines, and other elements that give the team clarity of purpose essential for high-quality performance. This is typically a 4-hour or 1-day meeting. The agenda may include the following:

- Introduction of team counterparts, including locations
- Further review of the key performance indicators (KPIs) generated in the initial workshop
- Review execution strategy, the planned tasks, and expected level of detail.
- Review schedule and agree on key milestones
- Define roles and responsibilities between team members
- Review the decision making process to allow timely decisions at the lowest appropriate level. Establish decision making protocol
- Communications and reporting – (meetings, reports, SharePoint site)
- Budget – agree on capital budgets for each work package
- Change management process
- Agree on how the chartering document will be used and monitored throughout the execution of the projects.

Desired outcome(s) include the following:

- Clear project-specific vision statement that has clearly aligned goals and outcomes
- Clear KPIs for the project
- Alignment around project approach and plan
- Clearly define team and individuals responsibilities
- Make and honor commitments and decision protocols

Deliverables for Task 1

- PXP completed and posted on SharePoint for access by entire team
- Periodic written project design schedule updates to keep the Owner's Project Manager informed as to the changes to the initial schedule outlined in this Scope.
- Monthly project invoice statements with a brief description of the work performed.
- Meeting minutes and updated Issues Matrix

- Charter document completed and endorsed by stakeholders and posted on the project SharePoint site. This will include Vision, Goals, KPIs, Roles and Responsibilities Matrix, Establish the decision making protocol, schedule and budget alignment.

Assumptions for Task 1

CH2M HILL is projecting that the services for task order 13 will require approximately 6 months. Budget status monitoring, project management, project controls, schedule status monitoring, and project invoicing are monthly activities for the duration of the project.

Task 2 Quality Assurance/Quality Control (QA/QC)

An internal QA/QC review for each work product for this Task Order will be performed by a senior reviewer. Comments will be documented and categorized into major, minor, and preferential comments. Comments will be responded to by team members and adjudicated prior to each deliverable being submitted to the City or DEQ.

CH2M HILL will establish a project Quality Control Manager and a Quality Review Team at the beginning of the project. The Quality Control Manager will develop a quality plan for the project and schedule quality reviews of the deliverables at each project phase.

The QA/QC process will be defined by CH2M HILL in a Quality Management Plan (QMP) that will include the following major components:

- Definition of Key Project Team members and their roles on the Project,
- Definition of the Project core technologies,
- Identification of the Project Quality Manager and Senior Technical Consultant (STC),
- CH2M HILL staff member responsible for quality control for each discipline used in the project as appropriate,
- The milestone dates for each review.

Task 3 Update Flows and Loads and Treatment Alternative Evaluation

The 2010 Facilities Plan Amendment included estimates of current and future flows and loads that affect treatment requirements for Twin Falls. These flows and loads estimates will be updated using data and events since 2010 (such as new industries in the service area) and incorporate this into this amendment. Based on these updated flow and loads, treatment alternatives for the WWTP (addressing capacity and regulatory issues) are developed. Specific activities, and work products from this phase are described in the following subtasks:

Subtask 3.1 Update Flows and Loads

- Review treatment plant historical influent wastewater flow and load trend(s).
- Review treatment plant historical industrial flow and load trend(s).
- Verify the 'committed' capacity within the City's service area – capacity at the WWTP that has already been purchased or allocated, but not currently used.
- Based on historical flows and loads, calculate the per capita average flow and load for the existing service area.
- Apply the per capita flows and loads to the population projection for the design year to establish average flows and loads at the design year.
- Multiply the annual average flows and loads by the peaking factors to establish average day maximum month, maximum day, maximum week, and peak hour for the design year.
- Apply assumed high and low annual growth rates to flow projections to bracket the range of anticipated years capacity related improvements could be needed.
- Develop flows and loads technical memorandum to reflect data from the updated analyses
- Meet with the City to review comments on the updated flows and loads.
- Update the flows and loads technical memorandum to reflect the City's comments.

Subtask 3.2 Evaluation of Existing Treatment Facilities

This subtask provides the evaluation of the City's existing treatment facility and associated pretreatment program. This includes an update to the existing process simulation and hydraulic models for the main WWTP.

Description

Work previously completed by the Consultant will be used in this task, updated accordingly to reflect any of the findings from the other Task 3 subtasks. Results from past reports will be documented in this task to provide one location for this information. Information developed in this task will provide the WWTP configuration and condition from which all follow-on treatment alternative configurations are based and developed.

CH2M HILL's whole-plant process simulator, Pro2D™, will be used to evaluate the existing WWTP. A level of calibration will be completed for this simulation, updating this to reflect the current wastewater characteristics at the facility. A hydraulic evaluation will also be completed for the existing WWTP. A hydraulic profile will be developed for the existing facility (with current projects in construction included), highlighting the associated capacity of the system. Major hydraulic bottlenecks that limit the overall capacity of the system will be identified. A summary of the individual unit process capacities (process and hydraulic) and overall treatment plant capacity will be provided.

An evaluation of the existing pretreatment facilities (PTF) will be completed. This includes an evaluation of the existing PTF at the ConAgra facility and new PTF at the Chobani facility. The capacities of these facilities will be documented, and their associated impacts on the main WWTP quantified.

Assumptions

Previous reports and studies will be used as the basis for information on the existing treatment facilities. Recent work and expansion at the WWTP will be documented as well.

Work Products

A technical memorandum will be developed, providing a summary of the past evaluation of existing treatment facilities.

Subtask 3.3 Development of Treatment Criteria

Objective

This subtask identifies criteria for the level of treatment to be included in alternatives.

Description

Level of treatment criteria will be identified for key parameters. Existing permit limitations for conventional parameters will provide the basis for some of these criteria. Others will be water quality driven and are still subject to upcoming TMDLs (e.g., phosphorus), or by reclaimed water considerations (e.g., nitrogen). For parameters with uncertain limitations, it may be appropriate to consider several levels of potential treatment (e.g., total phosphorus of 1.0 mg/L, 0.2 mg/L with or without trading, or 0.07 mg/L as presumed most restrictive limitation).

Assumptions

No more than 2 or 3 phosphorus criteria options will be established. Only one nitrogen criteria-based option will be established.

Work Products

Treatment criteria technical memorandum (electronic .pdf format)

Subtask 3.4—Alternatives Development

This task presents the evaluation and development of wastewater treatment alternatives and concepts for the City to address future growth and regulatory requirements. The work completed in the previous tasks will be used within this alternative development task, providing the design criteria and basis for the treatment strategy. A number of subtasks are included within as listed below and described in the following sections.

- 3.4.1 WWTP Alternative Evaluation
- 3.4.2 Auger Falls Summary and Wetlands Treatment Opportunities
- 3.4.3 Biosolids Considerations
- 3.4.4 Cost Estimating
- 3.4.5 Alternatives Evaluation Workshop

Subtask 3.4.1—WWTP Alternative Evaluation

Objective

The objective of this subtask is to develop a manageable number of reasonable wastewater treatment alternatives that meet the developed treatment (regulatory) and capacity criteria.

Description

This subtask will be part of an iterative approach with the other subtasks. The overall mass balance for the WWTP treatment alternatives will be developed under this task, but individual unit processes and treatment approaches will undergo further evaluations in the other tasks. Findings from these tasks will be incorporated into the process simulation and mass balance as appropriate to help with the overall treatment alternative evaluation.

The use of the process simulation developed in Task 2 will help, in part, to determine the size of the respective unit processes and configurations for each treatment alternative. A mass balance will be developed for each alternative, with the associated treatment performance documented. Hydraulic evaluations will be completed as required to evaluate the treatment alternative. A hydraulic profile will not be created for each alternative, but it is assumed that major bottlenecks will be eliminated as applicable for the respective treatment alternative. The hydraulic capacity of the respective treatment alternative will be documented.

The alternative evaluation for the existing PTFs in the City's service area will be limited to the expansion available for the current technology on the respective PTF site. Alternative technologies for pretreatment will not be considered.

Assumptions

A total of five base treatment alternative configurations and associated process simulations are proposed for this task.

Work Products

- Process Flow Diagrams for each treatment alternative
- Narrative description for each treatment alternative
- Process simulation mass balance printouts
- Technical memorandum summarizing evaluation (electronic .pdf format).

Subtask 3.4.2—Auger Falls Summary and Wetlands Treatment Opportunities

Objective

This subtask will document the ongoing work at Auger Falls and identify the potential for future treatment opportunities. This subtask is limited to a review of the existing work completed by the City and general discussion of treatment opportunities. Additional fieldwork for verification of site potential is not included.

Description

- A summary of the ongoing work by the City will be presented.
- Water reuse criteria established by DEQ will be summarized, and implications to the treatment alternatives presented in subtask 3.4.1 will be identified.
- Potential regulatory requirements through the upcoming TMDL process (e.g., temperature) may be addressed through the use of the Auger Falls site. These opportunities will be documented within this section (see also Task 4.2).

Assumptions

- Existing information developed by the City for the Auger Falls site will be used.
- No additional drawings or design details will be provided for the Auger Falls site.

Work Products

- Water Reuse text for the Wastewater Facility Plan (electronic .pdf format).

Subtask 3.4.3—Biosolids Considerations**Objective**

Develop alternatives for solids treatment and biosolids management considerations.

Description

- Once process modeling has been completed and the treatment process structures have been sized for the treatment alternatives, Consultant will develop preliminary analysis of solids treatment alternatives and biosolids disposal or beneficial use alternatives.
- Summarize Biosolids Management Planning technical memorandum for incorporation in the Wastewater Facility Plan.
- Describe the anticipated schedule for upgrades to solids treatment capacity based on the modeled treatment process alternatives.

Assumptions

- Biosolids Management Planning technical memorandum will be used for this subtask.

Work Products

- Biosolids Considerations report text for the Wastewater Facility Plan (electronic .pdf format).

Subtask 3.4.4—Cost Estimating**Objective**

Objective is to develop the conceptual cost estimates that will be needed for each treatment alternative evaluated in Task 3.

Description

Total life-cycle costs will be used, incorporating total capital and annual costs. CH2M HILL's parametric cost estimating system (CPES™) will be used in part to develop these conceptual life-cycle costs. Where appropriate, this cost-estimating system will be supplemented with vendor quotes or similar cost estimating information.

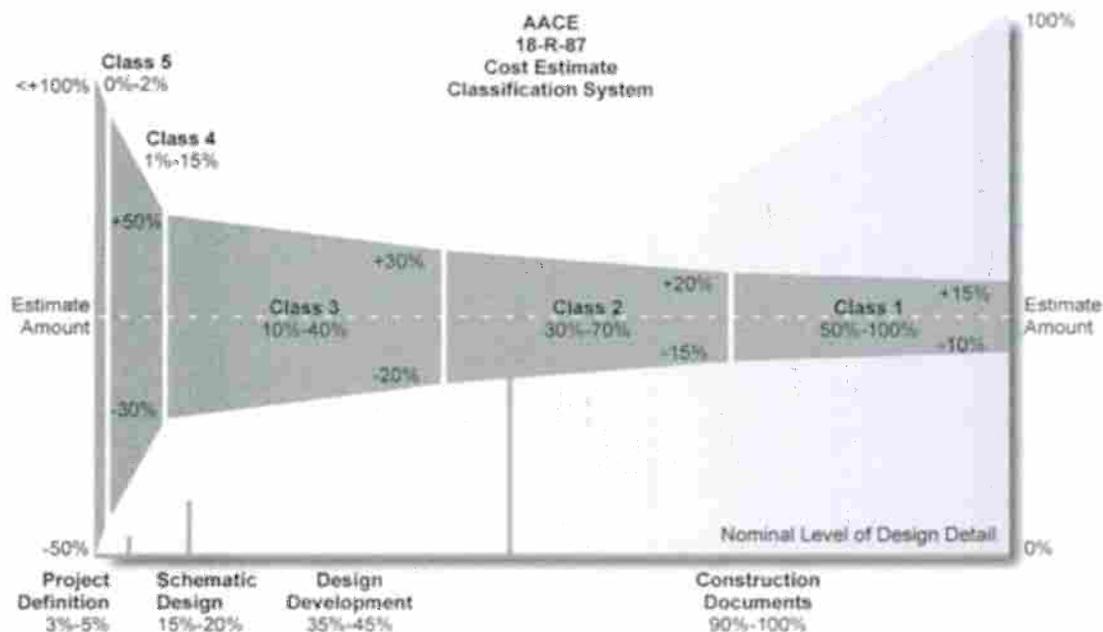
The objective of the life-cycle cost evaluation is to provide a comparison between the alternatives. Given the conceptual level of the alternative evaluation, the cost opinion includes contingencies and markups for each alternative. During future design phases, contractor markups and contingencies can be refined and reduced as additional design details become available which are captured in the cost estimate detail. These estimates are intended to be used only for comparing initial conceptual alternatives for the purpose of screening them to a reasonable few for further evaluation.

This estimating effort adopts the classification of estimates as defined by the Association for the Advancement of Cost Engineering (AACE). The industry classification system is Recommended Practice-17R-97: "Cost Estimate Classification System" and 18R-97: "Cost Estimating Classification System as Applied in Engineering, Procurement, and Construction for the Process Industries."

Figure 1 shows the relationship of level of detail to the expected accuracy of the estimate.

FIGURE 1

Construction Cost Estimate Accuracy Ranges



The capital costs for this report are defined as order-of-magnitude-level (Class 4) estimate as defined in the AACE International Recommended Practice No. 18R-97, *Cost Estimate Classification System As Applied in Engineering, Procurement, and Construction for the Process Industries*. An estimate of this type is normally expected to be within +50 percent or -30 percent of the actual construction cost. The final cost of the projects will depend on actual labor and materials costs, actual site conditions, productivity, competitive market conditions, bid dates, seasonal fluctuations, final project scope, final project schedule, and other variables. As a result, the final project costs will vary from the estimates presented in this report.

Assumptions

Life-cycle costs are to be developed for five treatment alternative configurations.

Work Products

- Technical memorandum summarizing total capital, annual, and associated life-cycle costs for each alternative
- Cost-estimating system printouts providing details for each treatment alternative cost opinion.

Task 3.4.5—Alternatives Evaluation Workshop

Objective

This goal of this task is for City's staff and management to evaluate alternatives using an evaluation/decision tool.

Description

The alternatives defined and developed in earlier tasks will be further evaluated in this task using the non-monetary and monetary information applicable to each. Monetary criteria will include capital, O&M and NPV costs. The alternatives will be scored in relation to the non-monetary criteria by City staff and management at this workshop, facilitated by Consultant. The benefit score will be used to calculate the benefit to normalized NPV cost score (see Figure 2 for a hypothetical example). The information and inputs to the monetary and non-monetary evaluation will be developed in previous tasks.

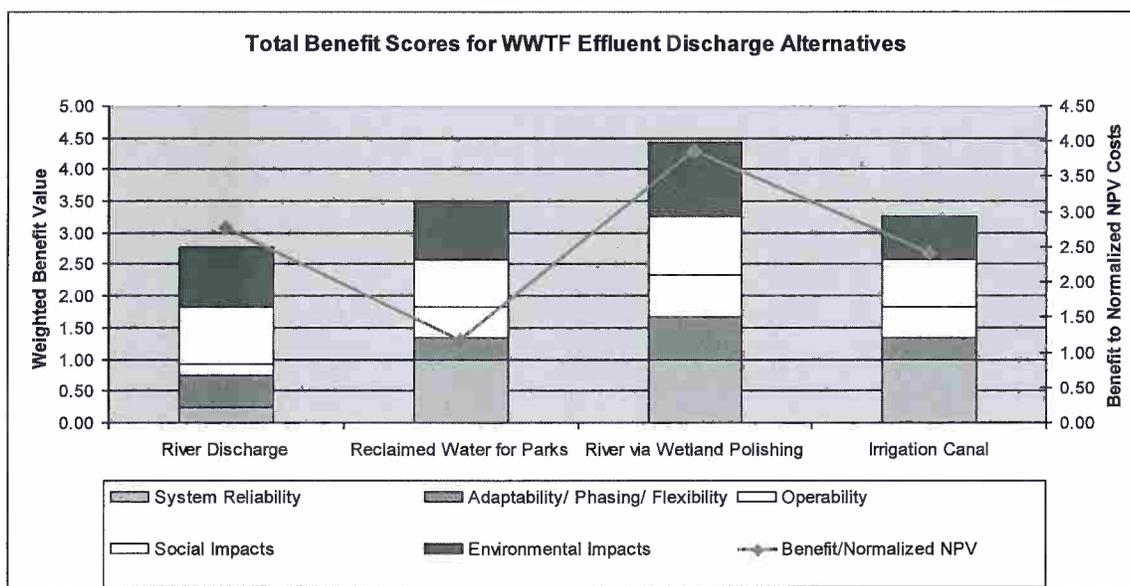


Figure 2

Assumptions

1. The Alternative Evaluation Workshops will be a 4-hour meeting, and will be facilitated by Consultant.

Work Products

1. The discussion and outcome of the workshop will be included in draft and final technical memorandum that is prepared for the alternative evaluation.
2. Presentation materials for the focus group meeting on alternatives evaluation.

Deliverables for Task 3

- Draft, Updated Flow and Load Technical Memorandum (electronic .pdf format)
- Draft, Technical memorandum summarizing treatment alternative evaluation (electronic .pdf format).
- Draft, Technical memorandum summarizing total capital, annual, and associated life-cycle costs for each alternative

Assumptions for Task 3

- The projected rate of increase in flows and loads is based on the 2033 population for the cities of Twin Falls and Kimberly.
- Historical flow per capita will be developed using historical population estimates from the U.S. Census Bureau.
- Growth in commercial flows will occur at the same rate as growth in population.
- City will provide one consolidated, unconflicting set of comments related to these scope items.
- Meeting will be located at Twin Falls City offices or WWTP and will last up to four (4) hours.
- Capacity improvements will not be identified with an anticipated year.
- City will provide list of developer purchased capacity for development that has not yet occurred.
- City will provide current Auger Falls reports and references for review

Task 4 Develop Capacity Triggers and Update Regulatory Considerations

The treatment alternative selected from Task 3 will be used within this task. For this selected alternative, capacity “triggers” – the influent flow or load that triggers the WWTP expansion – will be presented. The unit processes from the selected treatment alternative will be identified for each “trigger”.

The 2010 Facilities Plan Amendment included review and discussion of future regulatory issues that could affect treatment requirements for Twin Falls. These included potential Total Maximum Daily Loads (TMDLs) for phosphorus and temperature and potential future issues associated with nitrogen and “emerging compounds of concern.” The 2010 Amendment also included the Auger Falls project and how its implementation could affect treatment requirements. CH2M HILL will evaluate information and processes that have evolved since 2010 and incorporate that into this amendment.

Both the capacity and regulatory expansion requirements will be presented in the City’s capital improvement program (CIP) as applicable.

Specific activities, and work products from this phase are described in the following subtasks:

Subtask 4.1 Develop Capacity Triggers

- Identify the rated peak hydraulic capacity for each improvement relating to hydraulic and treatment capacity.
- Identify the rated process load capacity for each improvement.
- Prepare schedule of planned capital improvements required for hydraulic capacity and regulatory load reduction improvements (e.g., for phosphorus, see Task 4.2).

Subtask 4.2 Update Regulatory Considerations

- The Snake River in the Twin Falls area is currently listed as impaired for temperature, meaning that a TMDL will likely need to be developed by DEQ (unless some alternative regulatory process, such as a Use Attainability Analysis, or UAA, is conducted). In addition, DEQ and the U.S. EPA have initiated a process to review and potentially modify or amend the existing TMDL for phosphorus for the river. The following specific activities will be completed for this subtask: Review TMDL documents prepared by DEQ and EPA
- Meet with City staff to discuss the implications of pending or ongoing TMDLs with respect to treatment requirements
- If requested by the City, meet with DEQ staff in Twin Falls to discuss and understand the implications of pending or ongoing TMDLs
- Update future treatment requirements section of the WWTP facilities plan as appropriate if new information is available for specific parameters of concern (e.g., emerging compounds, ammonia).
- Update and summarize regulatory implications of Auger Falls project (technical evaluation for Auger Falls is part of subtask 3.4.2)

Deliverables for Task 4

- Draft Capital Improvements Schedule (electronic Microsoft Excel format).
- Final Capital Improvements Schedule (electronic Microsoft Excel format).
-
- Draft and final TM summarizing the update of regulatory considerations (electronic submittal only).

Assumptions for Task 4

- Review of TMDL information will be limited to those pertaining to the mainstream Snake River only (not other tributaries).
- City’s project team will provide TMDL documents prepared by DEQ or EPA.

- The City's Project Manager and/or environmental manager will attend any meeting with DEQ.
- Any meetings or coordination with EPA would be by phone or in Twin Falls (i.e., no travel to Seattle assumed).
- City will review schedule of capital improvements and update its 5 year CIP and provide comments within five business days.

Task 5 Draft and Final Plan Amendment

The findings from the previous tasks will be incorporated into an Amendment to the Twin Falls Wastewater Facilities Plan. This will provide an update to the recommended treatment alternatives for the expansion of the Twin Falls Wastewater Treatment Plant. The Amendment to the Twin Falls Wastewater Facilities Plan will be completed according to the requirements of the Idaho Department of Environmental Quality.

Subtask 5.1 Draft Facility Plan Amendment

Objective

The main report will present the story of the comprehensive planning effort that resulted in the long-term strategy and near-term actions for wastewater management for the City of Twin Falls.

Description

The Consultant will prepare draft documents that describe the Wastewater Facilities Plan. Appendixes will include an accumulation of previously completed Technical Memoranda that provide the technical basis for the content provided in the draft Wastewater Facilities Plan Document. The Table of Contents of the documents to be prepared is listed below:

The main report will be written for a target audience that includes interested technical officials responsible for planning, implementing, and approving wastewater facilities such as City of Twin Falls Public Works staff and Idaho Department of Environmental Quality staff. The outline consists of the following major headings:

- a) **Introduction.** The Consultant will prepare this section that describes:
 - i) the purpose, scope and need for the facilities plan amendment
 - ii) the report organization
- b) **Existing Conditions.** The Consultant will prepare this section that describes:
 - i) planning area identification
 - ii) description of existing treatment facilities
- c) **Future Conditions.** The Consultant will prepare this section that forecasts the following:
 - i) population growth
 - ii) flows and waste loads
 - iii) wastewater facilities needs
 - iv) conditions without the project
 - v) reference land use plans
- d) **Development and Initial Screening of Alternatives.** The Consultant will prepare this section that describes the following:
 - i) Description of problems and deficiencies with the existing facilities
 - ii) Development of Alternatives
 - iii) Treatment System Alternatives

- iv) Wastewater Management Options
- v) Alternative Selection and Decision-making Process
- vi) Presentation of Total Benefit Scoring for the Alternatives
- e) **Final Screening of Principal Alternatives and Plan Adoption.** The Consultant will prepare this section that describes the following:
 - i) Comparison of Technical Features of the Wastewater Management Alternatives
 - ii) Comparison of Costs for the Wastewater Management Alternatives
 - iii) Evaluation of Non-Monetary Decision Criteria
 - iv) Presentation of Total Benefit Scoring for the Alternatives
- f) **Selected Approaches, Description, and Implementation.** This section will describe the proposed Plan elements in more detail by providing the following:
 - i) Justification and Description of the Selected Approaches
 - ii) Cost Estimate for the Selected Approaches
 - iii) Implementation and Schedule for the Selected Approaches
- g) **Appendices.** This scope of services for this section is noted below:
 - i) **Project Costs.** This appendix will present the more detailed opinion of construction costs prepared by the Consultant.
 - ii) **Public Participation.** This appendix will summarize the community sounding board process that has been completed for the project to date.
 - iii) **References and Documents Cited.** The Consultant will prepare a list of the reports, and other documents that are cited in the Facilities Plan.

Subtask 5.2. DEQ, Strategic Planning Committee,, City Council Meetings

CH2M HILL will participate in one meeting with the DEQ Twin Falls regional office staff to inform them of this Facilities Plan Amendment project, and to seek input from the early in the project regarding issues or concerns that they would want to see covered in the amended plan.

CH2M HILL will participate in two meetings with the City's "Strategic Planning Committee" – one will occur early in the project to inform them of the objectives, scope and schedule for the project. The second will occur following completion of the draft plan amendment (Subtask 5.3). The second meeting will include presentation of the project results and upcoming steps needed to finalize the report and seek DEQ approval.

CH2M HILL also will participate in one meeting with the City Council to present the results of the plan update.

Subtask 5.3 Final Facilities Plan Amendment Report

- Comments from the City , Committee, and Council Meetings on the Draft report will be incorporated.
- Submittal of to DEQ. CH2M HILL will submit the final amendment to the DEQ for review and approval.

Deliverables for Task 5

- Powerpoint presentations for 3 meetings (two SPC meetings and one council meeting)

- Electronic Microsoft Word file and PDF of draft amendment to the Wastewater Facility Plan for City's review e-mailed or delivered to City's project manager.
- Twelve hard copies of the final plan delivered to City's project manager.

Assumptions for Task 5

- Two Strategic Planning Committee meetings, One Council Meeting
- One review meeting with DEQ in Twin Falls prior to development of the Draft Report

Task 6 Rate Impact Study

CH2M HILL will prepare a rate impact analysis in conjunction with the planning amendment effort for wastewater treatment projects to assist in determining the effect on sewer rates. CH2M HILL will review the cost and revenue impacts of the proposed wastewater plan amendment, determine the potential impact on sewer rates and the potential financial requirements. Specific activities, and work products from this phase are described in the following subtasks.

Subtask 6.1 Initial Data Collection and Analysis

CH2M HILL will provide the City with a detailed information request for basic data to be provided by City such as engineering reports, copies of relevant policies, current rate ordinances, financial statements, utility customer usage, billing data, budgets and other similar information. Historical annual customer water and wastewater billings, revenues, expenses and other financial data are desired for at least a 3-year period. Once the data are received, CH2M HILL will conduct an initial analysis for completeness. If necessary, a supplemental request may be made for additional data. CH2M HILL will then conduct a detailed analysis of the historical data to identify, investigate and explain data gaps, anomalies and uncertainties. The results of this analysis will serve as the basis for the financial projections to be used in assessing baseline conditions and impacts of proposed plan improvements.

Subtask 6.2 Revenue and Expense Projections

Using historical data analysis, CH2M HILL will prepare a baseline 5-year projection of revenues and expenses under current rates and operating conditions (before the new system modifications and capital improvements program). CH2M HILL will analyze existing customer accounts and billable volumes and make projections of future water consumption and wastewater generation. Revenue projections will be made by customer class under existing rates and by revenue or income category from non-rate sources. An analysis will be made of trends in major expense categories and projections will be made of expected operation and maintenance expenses. These will incorporate, as appropriate, current and proposed budgets. Projections will also be made of debt service requirements or loan payments. A 5-year cash flow analysis will be completed to determine the adequacy of revenues under existing rates and, if required, the percent increase in revenues required to cover future costs and expenses. The projections will serve as a baseline for comparison with expected requirements following the adoption of the WWTP Facility Plan Amendment.

Subtask 6.3 Financial Requirements Analysis

In order to project the potential impacts of the capital expenditures on City utility rates, we will analyze the financial requirements under three (3) different financing or scheduling scenarios. The potential scenarios will be discussed with City to establish the most advantageous options. For example, with bond or debt financing the annual costs can be spread over several years to better reflect the useful lives of the capital assets. Annual debt service requirements would then be calculated and added to the revenue requirements in the cash flow analysis. Other financial options might include grant financing; government subsidies; EPA, SRF, or RDA loans; and possibly the use of special development funds for some or all of the capital requirements. CH2M HILL will also consider any potential increases in annual operating cost resulting from the capital improvements.

Subtask 6.4 Financial and Rate Impacts.

CH2M HILL will prepare a forecast of cash flows for the sewer utilities including new capital and operating requirements for three (3) financial scenarios based on the above analysis and City input. The adequacy of existing rates and sources of income will be determined along with potential overall revenue increases that would allow implementing the CIP. CH2M HILL will work with the City in reviewing the analysis and projections in order to facilitate the adoption of an affordable CIP. CH2M HILL's analysis of rate impacts will be limited to the potential overall rate impact (as a percentage of current revenues) of the preferred alternatives will be developed.

Subtask 6.5 Draft and Final Financial Plan

CH2M HILL will prepare draft and final financial plans which provide for the generation of sufficient revenue to fund anticipated projects and expenses necessary for the new capital investments; costs related to the financing or direct construction of proposed wastewater treatment and disposal facilities; costs related to other infrastructure improvements recommended by the WWTP facilities plan amendment; other known operations and maintenance costs; and other financial requirements such as the maintenance of financial reserves. The 5-year financial plan will include:

- Estimated annual budgets for each of the next five (5) years for costs of operating, maintaining and repairing City's wastewater treatment system.
- A descriptive plan for raising sufficient revenue to meet the projected costs as outlined in the budgets, including adjustments or increases in user rates and fees, or adjustments to other sources of revenue.

Subtask 6.6 Prepare Technical Memorandum

A TM including the results and recommendations of Task 6 will be prepared and submitted to City.

Deliverables for Task 6

- Results of data collection, analyses and revenue and expense projections
- TASK 6 TM (draft and final) including draft and final financial plan

Assumptions for Task 6

- The draft and final financial plans will be based on the final cost and budget scenario established in the WWTP Facilities Plan Amendment. Additional capital and operational scenarios and/or modifications required for potential negotiations with DEQ and EPA will require a supplemental request for additional services, if necessary.

Compensation

Level of Effort

Table 1 presents a summary the task level of effort estimates are summarized in the following table. CH2M HILL has developed this level of effort estimate based on the work plan presented herein and assumptions stated previously. The fees will be billed as time and material, and will not exceed the total amount below without prior approval by the City.

The task budget subtotals identify the focus and level of effort for this work; however, they do not represent itemized not-to-exceed budget limits. The overall budget total for this work will be the not-to-exceed budget limit.

Table 1

Fee Estimate

Task	Labor \$
Task 1 – Project Initiation and Management	\$ 9,734
Task 2 – Quality Assurance/Quality Control (QA/QC)	\$ 5,287
Task 3 – Develop Capacity Triggers	\$ 50,782
Task 4 – Update Regulatory Considerations	\$ 20,415
Task 5 – Draft	\$ 45,823
Task 6 – Rate Impact Study	\$ 46,052
Estimated Direct Expense and Travel (included above in Task 3 and Task 6)	Task 3, \$ 2,800 Task 6, \$ 3,145
TOTAL BUDGET TASK 1 THROUGH 6	\$ 178,093

Table 2

Schedule

The key milestones and deliverable dates for each of the 6 tasks are summarized in Table 2.

Task/Activity	Milestone/Deliverable Completion Date	Comments
Subtask 1.4 Project chartering meeting	Early October 2012	
Subtask 3.1 Update flows and loads TM	Mid October 2012	
Initial meeting with DEQ on plan amendment	Mid October 2012	
Subtask 3.2 Existing treatment facilities TM	End October 2012	
Subtask 3.3 Treatment criteria TM	Mid November 2012	
Initial meeting with Strategic Planning Committee	Mid November 2012	
Subtask 3.4 Alternatives evaluation workshop	Late November 2012	
Subtask 3.4 Alternatives evaluation TM	End November 2012	
Subtask 4.1 CIP Spreadsheet	Early December 2012	
Meeting with DEQ on regulatory issues	Early December 2012	If requested by City
Subtask 4.2 Regulatory considerations TM	Mid December 2012	
Subtask 5.1 Facility plan amendment draft report	Mid January 2013	
Second meeting with Strategic Planning Committee	Late January 2013	
Subtask 5.2 Facility plan amendment final report	Mid February 2013	
Subtask 6.3 Draft SMCIP	Mid December 2012	
Subtask 6.5 Draft financial plan	Mid January 2013	
Subtask 6.5 Final financial plan	Late February 2013	
Subtask 6.6 Draft rate study TM	Early March 2013	
Meeting with City Council	Early March 2013	

Task/Activity	Milestone/Deliverable Completion Date	Comments
Subtask 6.6 Final rate study TM	Mid March 2013	
Project close out	Late March 2013	

The schedule presented above is an estimate of the project duration and does not contractually bind CH2M HILL and City to interim or final completion milestone dates.