



# City of Woodland

## REPORT TO MAYOR AND CITY COUNCIL

AGENDA ITEM

TO: THE HONORABLE MAYOR  
AND CITY COUNCIL

DATE: May 5, 2009

SUBJECT: Award Consultant Agreement to West Yost Associates for Program Management of the Davis-Woodland Water Supply Project, CIP#08-07, Phase 1, and authorize City funded expenditures of \$256,552 to Execute Phase 1A

### **Report in Brief**

The Davis-Woodland Water Supply Project (DWWSP) planning and environmental work confirms this project is the most viable, reliable, cost-effective and environmentally responsible solution for addressing and meeting the long-term water quality, supply, and wastewater regulatory and management needs for the cities of Woodland and Davis and the University of California at Davis (the Project Partners). Compliance with current and anticipated state wastewater discharge permit standards warrants for the Project Partners compels the introduction of surface water based on the new National Pollution Discharge Elimination System (NPDES) Permits recently received by Woodland and Davis.

Consistent direction from Woodland's City Council has been to continue to move this project forward with due diligence. The Project Partners technical staff believes that consultant support is needed on a programmatic level to coordinate, consolidate and oversee water right permitting, engineering, right-of-way, legal and associated sub-consultant activities in order to move this project forward through the pre-design process. Accordingly, staff is seeking to execute the attached multi-phased consultant contract and scope of work with West Yost Associates (WYA) and to request authorization to expend \$630,802 shared total for Phase 1A on behalf of the Project Partners.

Staff recommends that the City Council award the attached Consultant Support Agreement to West Yost Associates for Program Management of Phase 1 of the DWWSP and authorize Woodland's share of joint-funded expenditures up to \$256,552 toward the Phase 1A shared total of \$630,802 for program and sub-consultant management services through October 2009.

## **Background**

The City of Davis has served as lead agency on behalf of the Project Partners in executing and administering the majority of consultant support contract requirements for the project's technical analyses and throughout the environmental review process. It's the consensus and desire among the Project Partner technical staff that Woodland assumes the lead in executing and administering the next phases of consultant support contract requirements on behalf of the Project Partners pending the establishment of a joint regional authority (JPA or other mechanism) for the single point management and oversight of future joint DWWSP initiatives.

West Yost Associates (WAY) was selected by the City of Davis under a quality-based selection process to provide consultant support to the DWWSP through the project's environmental review process. In 2008, the City of Woodland also selected WYA under a separate quality-based selection process to manage and support a variety of other major water-related Capital Improvement Projects. Besides their in-depth knowledge and experience, WYA continues to bring to the DWWSP comprehensive understanding of project stakeholder concerns and a recognized high level of leadership on regional water issues.

## **Discussion**

This proposed contract facilitates actions necessary to responsibly and assertively advance the project. It defines services that WYA and approved sub-consultants are projected to provide during the period extending from May 1, 2009 through June 30, 2011 (defined as Phase 1 on the attached project schedule). This scope also covers services required to coordinate and integrate legal services provided by Bartkiewicz, Kronick and Shanahan (BKS) under a separate contract with the University of California at Davis (UCD).

Phase 1 takes the project from its current planning level to a level of pre-design that could facilitate solicitation of project design and construction proposals if a Design-Build (DB) or Design-Build-Operate (DBO) method of execution is selected. Phase 1 is further broken down into sub-phases to facilitate advancement of the highest priority items on the project schedule, while minimizing initial consultant costs; pending the anticipated establishment of some form of a joint authority to oversee and manage the remaining Phase 1 sub-phases. Accordingly, the work described under this scope is proposed to be authorized, funded and performed in three sub-phases as reflected in the attached Cost Estimate Summary and reflected below:

- Phase 1A - May 2009 through October 2009, concentrating on JPA formation, securing water rights, develop summer water contract potential, initiating public outreach, and coordinating RD2035 intake structure with DWWSP;
- Phase 1B - November 2009 through March 2010, concentrating on continuation of the above, initiating negotiations for securing rights-of-way, and securing project funding,

**SUBJECT:** Award Consultant Agreement to West Yost Associates for Program Management of the Davis-Woodland Water Supply Project, CIP#08-07, Phase 1, and authorize City funded expenditures of \$256,552 to Execute Phase 1A

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- Phase 1C - April 2010 through June 2011, concentrating on continuation of the above, facilities design, permitting and execution methodology and packaging for solicitation

Conducting work in this manner minimizes the initial financial burden on the Project Partners, while advancing the critical path elements of the project schedule. This facilitates development of information needed by the Project Partners to make informed decisions on advancement of the project consistent with incremental elements of project cost. At the conclusion of Phase 1 activities, work will have advanced to a point that could allow requests for proposals to be issued for construction of the project, depending on the methodology selected for design and construction.

Before the end of Phase 1, a follow-on contract will be developed for Phase 2 and brought to the Project Partners for approval, which will advance the project from project construction to start-up and operation. (Startup is currently envisioned in 2016.) Phase 2 will begin with the review of the proposals issued at the end of Phase 1, and selection of the contracting entity or entities that will design and construct the project facilities. The remainder of Phase 2 will then be devoted to constructing the project facilities, finalizing all permits, rights-of-way acquisition, and initiating project start-up.

### **Fiscal Impact**

This project incurs no cost to the General Fund. Cost sharing under this contract for joint-funded work continues as outlined under the latest amendment to the Project Partner MOU based on projected project benefit with Woodland's share at 52.1%, Davis at 44.4% and UC Davis at 3.5%. Woodland's share under Phase 1A is \$256,552. This amount doesn't match the above percentages because Phase 1A includes some work for the City of Davis that is not joint-funded. Woodland funding is two-thirds through the Water Enterprise, Fund 210, and one-third through the Water Development, Fund 584. Sufficient funding for this sub-phase and follow-on sub-phases is available in the current year's budget. Sufficient funding is also reflected in the Capital Budgets for FY 09/10 and 10/11. The Project Team will return to Council for authorization to expend funds for each individual future sub-phase, 1B and 1C. Each Project Partner will separately approve the authorization and funding for their shares of the joint-funded consultant efforts under this agreement.

### **Public Contact**

Posting of the City Council agenda, public presentations to the Woodland Chamber of Commerce Water Advisory Committee and bilingual utility billing insert newsletter updates.

### **Council Committee Recommendation**

The Infrastructure Committee met on April 21, 2009 to receive a project update and briefing on this initiative. The Committee recommends Council support for award of this contract.

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**Recommendation for Action**

Staff recommends Council award the attached Consultant Support Agreement to West Yost Associates for Program Management of Phase 1 of the DWWSP and authorize Woodland's share of joint-funded expenditures up to \$256,552 toward the Phase 1A shared total of \$630,802 for program and sub-consultant management services through October 2009.

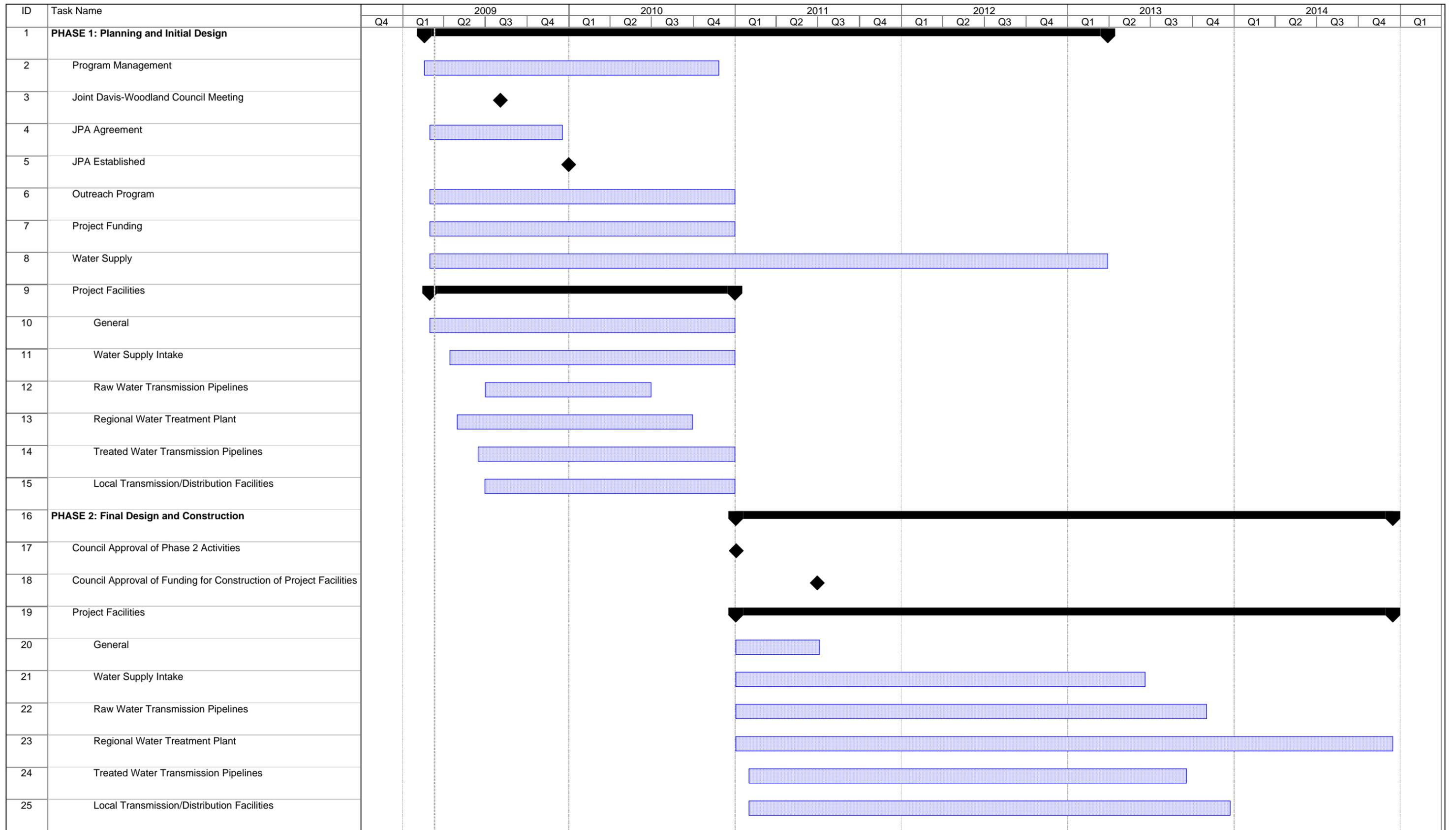
Prepared by: Dick Donnelly, P.E.  
Deputy Director Public Works

Reviewed by: Gregor Meyer  
Public Works Director

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Mark G. Deven  
City Manager

Attachments: Project Schedule  
Draft WYA Scope of Work  
DWWSP Cost Estimate, Phase 1

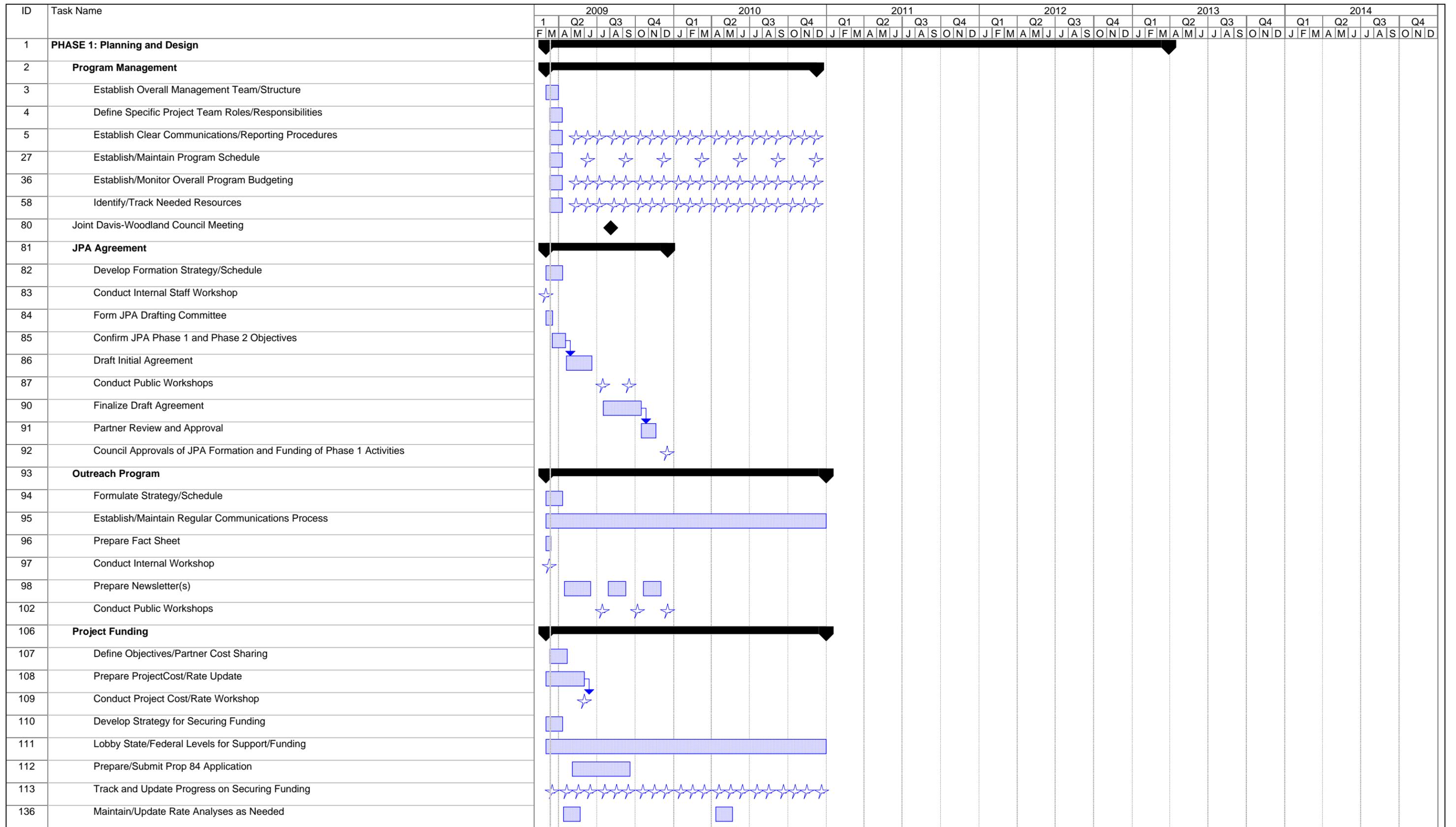


Project: 2009 Updated DWWSP Over: Date: Wed 3/11/09

Task Milestone Rolled Up Task Rolled Up Progress External Tasks Group By Summary

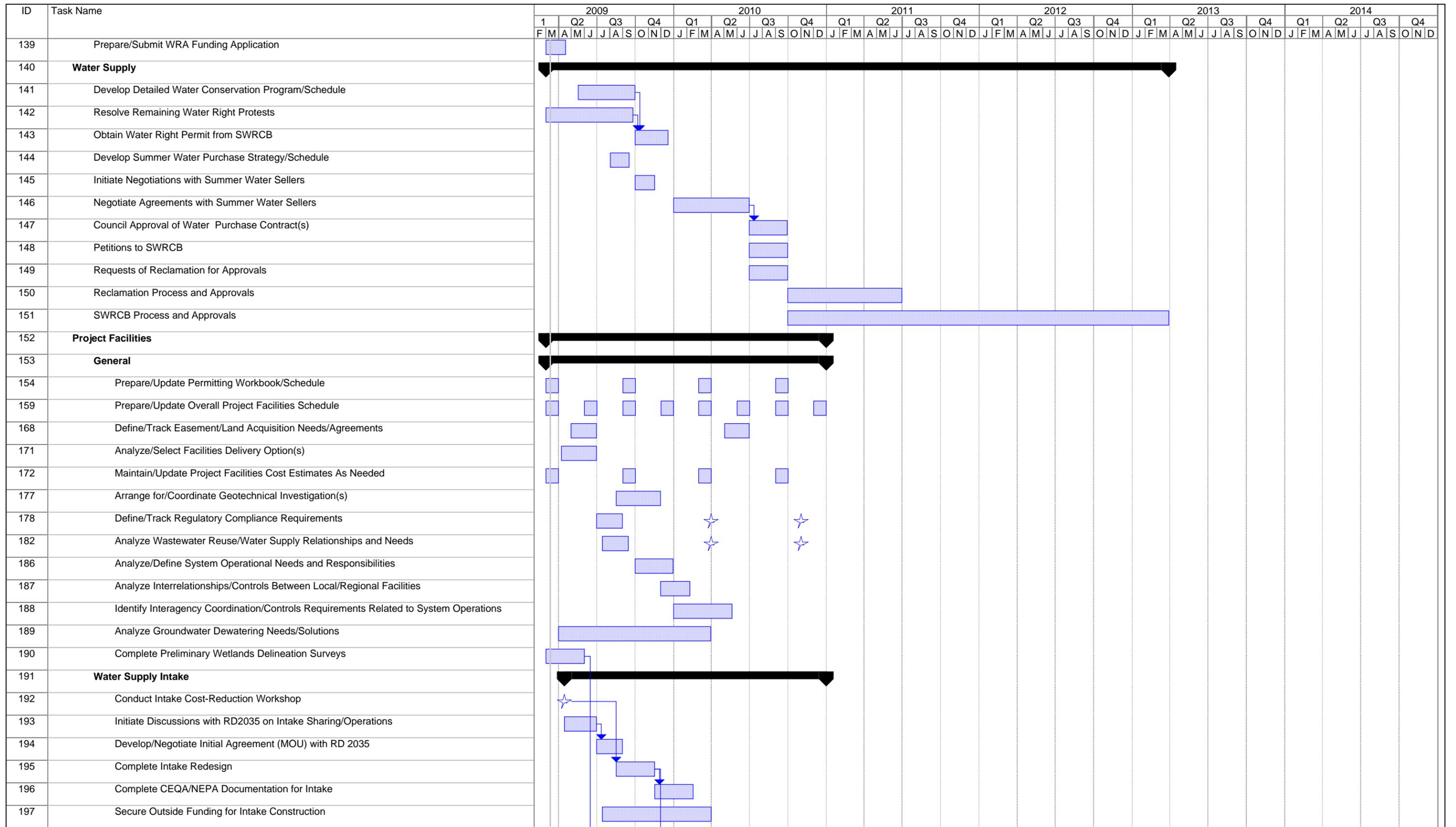
Progress Summary Rolled Up Milestone Split Project Summary Deadline

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Project: 2009 Updated DWWSP Phase 1  
Date: Wed 3/11/09

Task		Milestone		Rolled Up Task		Rolled Up Progress		External Tasks		Group By Summary	
Progress		Summary		Rolled Up Milestone		Split		Project Summary		Deadline	



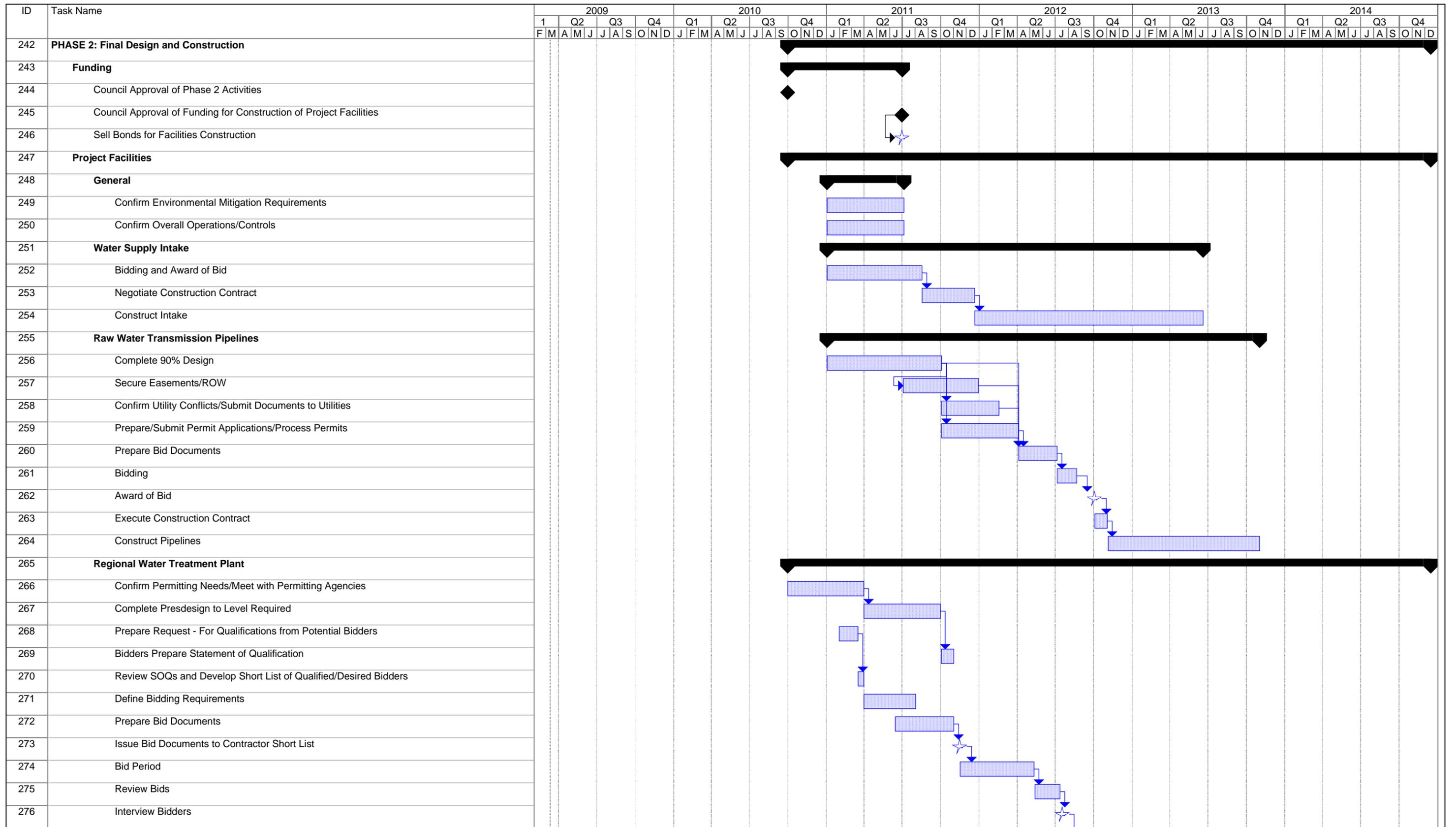
Project: 2009 Updated DWWSP Phase I  
Date: Wed 3/11/09

Task [Blue Box] Milestone [Black Diamond] Rolled Up Task [Blue Box] Rolled Up Progress [Black Bar] External Tasks [Grey Bar] Group By Summary [Black Arrow]

Progress [Black Bar] Summary [Black Arrow] Rolled Up Milestone [White Diamond] Split [Dotted Line] Project Summary [Grey Arrow] Deadline [Green Arrow]







Project: 2009 Updated DWWSP Phas  
Date: Wed 3/11/09

Task [Blue Box] Milestone [Black Diamond] Rolled Up Task [Blue Box] Rolled Up Progress [Black Bar] External Tasks [Grey Box] Group By Summary [Black Arrow]

Progress [Black Bar] Summary [Black Arrow] Rolled Up Milestone [White Diamond] Split [Dotted Line] Project Summary [Grey Arrow] Deadline [Green Arrow]



# DAVIS-WOODLAND WATER SUPPLY PROJECT SCOPE OF SERVICES

**APRIL 2009**

## SCOPE OF SERVICES

This document defines services that West Yost Associates (WYA) and its team of sub-consultants will provide during the period extending from May 1, 2009 through June 30, 2011, in support of the Davis Woodland Water Supply Project (DWWSP). This time period matches the time required to complete work tasks defined in Phase 1 of the updated DWWSP schedule. This time period has been further broken down into sub phases to facilitate completion of the highest priority items on the project schedule, namely:

- Outreach to both city councils and the general public, leading to support at the joint council meeting this summer to move forward with formation of the JPA.
- Drafting of the agreement and formation of the JPA.
- Positioning to secure funding for project implementation as federal and state funding programs evolve over the next two years, and updating the rate analyses to provide continuing input on the financial impacts of this project on the Project Partners rate payers.
- Initiating and negotiating an agreement with RD 2035 for joint use of the intake structure and advancing work on the intake structure design and environmental work to take advantage of funding opportunities as they arise.
- Resolving all the protests on the water rights application, and securing SWRCB issuance of the water-right permit.
- Moving forward on contacts with summer water sellers, and initiating contract negotiations and technical studies (focused environmental work if required) needed to secure firm commitments from these sellers.
- Advancing work on facilities permitting and land acquisition and/or easements and rights-of-way to ensure that these critical path activities move forward in a timely manner consistent with the overall schedule.

After the JPA is formed (October 2009 is targeted as the time when council support for the JPA will be issued), and a clearer picture develops on potential project funding (assumed to be the end of the first quarter of 2010), the technical work needed on project facilities design and construction can be aggressively pursued (leading to the completion of the Phase 1 work by the end of the 2011 fiscal year). To match up with this time frame, the work described in this work scope will be performed in the following three phases:

- Phase 1A - April 2009 through October 2009, concentrating on securing support for the project and JPA formation.

- Phase 1B - November 2009 through March 2010, concentrating on securing project funding and water rights and supplemental water supply.
- Phase 1C - April 2010 through June 2011, concentrating on facilities design, permitting and securing rights-of-way.

Each work task contains a description of the work to be completed in each phase, and is matched with an associated schedule and budget. For some tasks, the work effort will extend over the entire three phase period (e.g., Program Management). The budget reflects the level of effort expected during each separate work phase.

These Phase 1 services are intended to accomplish the following objectives: (1) Identify and pursue DWWSP implementation strategies that will reduce project costs and resulting customer rate impacts; (2) Pursue outside funding opportunities and use of lower-cost financing options; (3) Develop the project to a level that meets on-going State Water Resources Control Board (SWRCB) water right application diligence requirements and places DWWSP Project Partners in a position to take advantage of funding opportunities in a timely manner; (4) Keep policy makers and the communities informed and involved on project purposes and progress; (5) Identify fatal flaws, if any, in project implementation; and (6) Advance project facilities planning/design to a level that facilitates better cost estimating and clear identification of the preferred project delivery approach. These objectives will consider the findings and recommendations of the National Water Research Institute (NWRI) July 2008 Independent Advisory Panel report on the DWWSP, and the recommendations contained in the Review of City of Davis Water Resources Master Plan prepared by Drs. Edward Schroeder and George Tchobanoglous.

### **Task 1: Program Management**

#### Phase 1A, 1B, and 1C

Program Management will occur throughout Phase 1A, 1B, and 1C.

WYA will assist the DWWSP Project Partners in administering this project by:

- Assisting in establishing the overall structure and assigned roles and responsibilities of Project Partner staff and managers, and in defining resources needed to maintain the work effort in a timely manner;
- Coordinating monthly project team meetings to monitor progress on approved work, make joint decisions to facilitate progress as the project unfolds and minimize the need for redo of project work products, and provide the basis for keeping stakeholders and policy-makers apprised of progress;
- Attending meetings with the Partners' project managers as required to monitor progress and preparing for and participating in other meetings with Project Partner's city councils or other bodies as requested;
- Coordinating with the Joint Powers Authority (JPA) that will be formed by the conclusion of Phase 1B;

- Coordinating activities of sub-consultants and legal consultants (note: legal services from Bartkiewicz, Kronick, & Shanahan (BKS) will be separately contracted with the Project Partners, but will be closely coordinated with the work effort by the WYA consultant team);
- Preparing updates to the project schedule as needed;
- Preparing updated project and construction cost estimates; and
- Establishing a web-based site for documentation sharing and other general project team communications.

Subconsultant Environmental Science Associates (ESA) will allocate project management efforts to this task for their work, including tracking and updating budget and schedule for each task and phase of work, and review of work products for quality, and will ensure that sufficient resources and staff are made available to meet the project needs. ESA will participate in up to 26 monthly project team meetings (April 2009 through June 2011) including preparation and participation in the joint Davis-Woodland City Council meeting. The monthly meetings will be used to monitor progress on approved work, help in the preparation of updated project schedules and cost estimates.

A special effort will be devoted to preparation for and participation in the joint Davis-Woodland City Council workshop to be scheduled during the summer of 2009. This will be a key initial milestone. The Project Partners meeting in May should be devoted to defining an agenda for this meeting, and outlining the specific action plan needed to build a greater level of Project understanding within the Davis and Woodland city councils and management teams as well as enable the team to make an effective presentation at this meeting.

Phase 1A, 1B, and 1C Deliverables: meeting minutes, regular progress reporting on budget and schedule issues, and regular updates of action plans for each of the other work tasks.

## **Task 2: JPA Agreement**

### Phase 1A and 1B

Bartkiewicz, Kronick and Shanahan (BKS), under a separate contract, will lead this task. The objective will be to obtain support from both city councils for pursuing the JPA at, or closely following, the joint council meeting (working in concert with the outreach program), with the target of having the JPA in place by the end of 2009 or early 2010. BKS activities include:

- Working with the Project Partners to draft an initial and final JPA agreement;
- Participating in public workshops and other meetings with the Project Partners related to the JPA formation, review of the draft agreement, and integration of input received from the Project Partners; and
- Presentation of the JPA Agreement to the city councils of the Project Partners.

Although the majority of this task will be led and completed by BKS, WYA will provide appropriate technical support, as requested by BKS, to develop the JPA agreement and related public outreach strategy. WYA will also participate in focused team meetings to discuss and assist in negotiation of the JPA agreement.

Phase 1A and 1B Deliverables: technical input to the JPA team, comments and questions on draft documents, and participation in meetings where appropriate.

### **Task 3: Water Supply**

The water supply task involves: (1) legal activities to secure water rights and summer water supplies, and (2) conservation strategies for increasing water use efficiency.

#### Phase 1A, 1B, 1C

##### *Subtask 3.1 Water Rights*

BKS activities will include:

- Resolving the remaining water rights protests; and
- Obtaining the water-right permit from the State Water Resources Control Board (SWRCB).

Although the majority of Subtask 3.1 will be performed by BKS, WYA will provide technical input as needed for protest resolution and for processing of the water-right application.

ESA, under this contract, will also provide technical assistance to BKS. ESA will continue to support the resolution of remaining protests of California Department of Fish and Game (CDFG) and California Sportfishing Protection Alliance (CSPA), and provide SWRCB Hearing Support. ESA's effort will include preparing information as directed by the Project Partners and legal counsel to respond to specific protest items and arranging and facilitating meetings with these two entities and the SWRCB. Because it is not included in this work scope, should WYA or ESA be required to present expert testimony at a SWRCB hearing, an additional scope and cost estimate for this task will have to be added to this work scope.

ESA will implement the following tasks as needed:

- Information request response: As directed by the Project Partners and legal counsel, ESA will provide information that addresses protest issues received by CDFG and CSPA, primarily summarizing information from the DWWSP EIR and providing additional supplemental environmental information. ESA will excerpt relevant information and prepare written information summaries and exhibits as needed. ESA will coordinate information from the RD 2035 project process as well.
- Agency Meetings: As directed, ESA will arrange, facilitate and present information at up to 6 meetings with the SWRCB, CDFG and/or CSPA and participate in up to 6 conference calls with the Project Partners to prepare for these meetings.

Phase 1A, 1B, 1C Deliverables: 1) Meeting agenda, meeting materials, meeting notes; and 2) Supplemental information as directed

## Phase 1B, 1C

### *Subtask 3.2 Summer Water*

BKS, under a separate contract, will lead this subtask. BKS activities include:

- Initiating discussion and negotiation of draft agreements with summer water sellers.

WYA will provide technical input to legal agreements, prepared by BKS and others, including summer water purchase agreement(s) and water right permits. WYA will also participate in focused team meetings to discuss the strategy for, and assist in negotiation of, summer water purchase agreements.

ESA, under this contract, will also assist BKS. ESA activities will include:

#### 1. Environmental Review and Approach for Summer Water Transfers

The *Davis-Woodland Water Supply Project Environmental Impact Report* (2007) examined impacts associated with the acquisition of surface water supplies to meet projected demands associated with buildout under approved General Plans within its service area. The DWWSP Project Partners identified a maximum summer water transfer need of up to 19.5 TAF/yr of additional supply. The DWWSP EIR evaluated up to five potential sources for water transfers and provided the foundation for future project-level CEQA review and documentation for proposals to acquire summer water transfers.

The Project Partners now propose to pursue two or more specific water transfers. ESA will prepare the subsequent environmental review for this specific acquisition proposal. The ESA scope and budget in this contract will provide for preparation of a Supplemental EIR, tiered from the DWWSP EIR, to address acquisition of up to two potential water transfers: one in-county water transfer source and one out-of-county water transfer source. It is assumed that both of these transfers will be from among the five previously evaluated in the DWWSP EIR. This scope of work assumes that the surface water modeling prepared in the DWWSP EIR remains valid. It is expected that additional groundwater modeling of the preferred transfer scenario(s) will be required, but this effort is not included in this scope of work at this time.

The Supplemental EIR will focus on the project-level impacts associated with a specific summer water purchase/transfer option that relates primarily to potential effects within the service area of the transferring agency (i.e., groundwater use, land use / farming changes). This approach will eliminate repetitive discussions of issues previously addressed in the DWWSP EIR and focus the Supplemental EIR on the actual issues ripe for decision.

#### 2. Review of Existing Information/Define Water Transfer Option

ESA will review existing documentation and provide a thorough literature review to assist the project team in identifying the preferred senior water rights holder transfer option. This selection will be the basis for the environmental review.

### 3. Prepare Public Draft Supplemental EIR

ESA will prepare an administrative Draft Supplemental EIR to address the project-level impacts associated with up to two specific water transfer proposals (one in-county and one out-of-county). The key issues to be addressed will be effects on groundwater, surface water, land use / agricultural and biological resources. Additional groundwater modeling is expected to be required but this effort is not included in this scope and budget at this time. It is assumed that the surface water modeling conducted for and presented in the DWWSP EIR remains valid and adequate for use in this Supplemental EIR analysis.

ESA will incorporate one round of comments from the DWWSP partners and incorporate the appropriate changes into the Administrative Draft Supplemental EIR. ESA will then prepare thirty (30) copies of this document for public circulation, and will deliver fifteen (15) copies to the State Clearinghouse. ESA will develop a distribution list and distribute the remaining documents to local and regional agencies and interested parties. ESA will draft the required notices for the DWWSP Partners to file with the State Clearinghouse and County Clerk.

ESA will coordinate and attend the NOP scoping hearing, the public hearing on the Draft Supplemental EIR, and the EIR certification hearing and make a presentation regarding the environmental impact findings as required. It is assumed that the public hearings will support a joint CEQA/NEPA document and will satisfy the public review tasks for the NEPA Environmental Assessment described below.

### 4. Prepare Final Supplemental EIR

ESA will prepare draft written responses to comments received on the Draft Supplemental EIR. ESA will prepare ten (10) copies of the response to comments addendum and will distribute them to commenting agencies and other interested parties as directed by the DWWSP Partners. ESA will prepare a draft and final mitigation monitoring and reporting program (MMRP) as well. ESA will prepare draft notice of determination for the DWWSP Partners to file upon adoption of the Final Supplemental EIR and project approval.

### 5. National Environmental Policy Act (NEPA) Environmental Assessment

The *Davis-Woodland Water Supply Project Environmental Impact Report* (2007) identified the majority of proposed transfer sources as CVP contractors. NEPA compliance is required for Transfers and Exchanges of CVP water with Non-CVP contractors because the U.S. Bureau of Reclamation (Reclamation) maintains discretionary approval of the transfers.

Our approach for this task includes preparation of a NEPA Environmental Assessment (EA) for the proposed water transfer to be prepared in conjunction with the proposed CEQA compliance document. Depending on the needs of the Bureau of Reclamation, the document may be prepared as a joint CEQA/NEPA document or a stand alone NEPA EA. Preparation of the CEQA and NEPA compliance documents in conjunction with another will result in time savings and avoid duplicative analysis. The same technical assumptions and assumptions for public noticing and review described under the preparation of the Supplemental Draft EIS will also be required for this task. It is anticipated that in addition to the focused issues identified in the Supplemental EIR, the following NEPA issues will require an expanded discussion in the EA: Surface Water Resources, Groundwater Resources, Biological Resources, Land Use, Cultural Resources, Indian Trusts Assets, Socioeconomic Resources, and Environmental Justice.

Phase 1B, 1C Deliverables: (1) Administrative Draft Supplemental EIR – Electronic files and Five (5) hard copies; (2) Public Review Draft Supplemental EIR – electronic files, thirty (30) hard copies, and thirty (30) CD’s; (3) Distribution List; (4) Delivery of fifteen (15) copies to the State Clearinghouse and remaining copies to parties on distribution list; and (5) Draft (electronic copies and five (5) hard copies) and Final Response to Comments Addendum (electronic files, ten (10) hard copies, and Ten (10) CD’s).

### *Subtask 3.3 Conservation*

Work should begin on development of a more aggressive water conservation element of the DWWSP. Benefits from such an effort include:

1. **SWRCB Approval** – More efficient water use is expected to be a condition for issuing any new water right permits.
2. **Political Acceptance** –There is an element of political acceptance related to more aggressive water conservation for major water infrastructure investments.
3. **Reduced Project Costs** – annual operating costs could potentially be reduced by reducing overall customer demand.
4. **Reduce Customer Bills** – There will undoubtedly be greater focus on water rates by decision makers and the public. Customers will benefit from knowing what actions they can take to reduce their water consumption, and thus reduce their water bills.
5. **Funding Access** – Access to state (and perhaps federal) funding is expected to be conditioned on a requirement for more aggressive water conservation.

Both Woodland and Davis have a growing concern regarding climate change and actions that could be taken by each City and individuals to reduce their “carbon footprint”. Focusing attention on more aggressive urban water conservation contributes to this visible public policy issue.

To begin this effort, WYA will:

Phase 1A

1. Quantify Current Accomplishments. Assemble up-to-date conservation accomplishments for Davis and Woodland, with an emphasis on quantitative water savings. This will be documented in a technical memorandum. It is anticipated that much of the work compiling this information will be completed by staff from the Project Partners. WYA will primarily be responsible for integrating this information into a comprehensive document for use in public outreach, discussions with the state regulatory agencies, and in other associated outreach efforts.
2. Develop An Implementation Plan for Conservation Commitment. Working with staff of both cities, WYA will develop a conceptual plan, in the form of a technical memorandum, defining what is needed to meet the “additional ten percent” conservation performance commitment in the Final EIR for the DWWSP.

Phase 1B, 1C

1. Develop Draft Response to Expected New Conservation Requirements. Develop a similar conceptual work plan, also in the form of a technical memorandum, for what might be needed if the cities are required by legislation to meet the Governor’s water conservation goal: reduction in per capita water use of 20 percent by 2020. This will require identification of baseline conditions, and initial discussions with the Department of Water Resources and/or the California Urban Water Conservation Council conservation staff about how performance will be measured.
2. Public Outreach. Provide early outcomes from items 1-3 above in the public outreach program. Conservation is implemented through public information and outreach, because it requires largely voluntary cooperation by thousands of individual customers. Early and ongoing public outreach is likely to be a requirement of a successful, more aggressive water conservation program.

Development of conceptual plans in items 2 and 3 above will consider recommendations of the State Landscape Task Force’s October 2005 report and subsequent legislative and/or regulatory implementation of the Task Force’s recommendations.

Phase 1A Deliverables: TM describing conservation accomplishments and a draft conservation implementation plan.

Phase 1B, 1C Deliverable: TM describing potential conservation requirements by 2020.

#### **Task 4: Public Outreach Program**

The July 2008 NWRI report strongly encouraged the Project Partners to “...develop an effective public outreach program to ensure the necessary support from the community.” Several policy-makers and community members alike continue to question the need and/or timing for the project, and are concerned about the substantial increase in consumer rates to pay for the project. The NWRI panel recognized that the key project element to be addressed in this public outreach effort should be the projected increase in water rates. The main objective of this task is to proactively aid both the general public and the decision-makers to understand the “true cost” of water, the options considered in arriving at the need for the DWWSP, the benefits that the DWWSP will provide to the public, and measures being taken, or to be taken, to manage project costs through several key measures. As required the collaborative specialist will assist in defining stakeholder and public outreach strategy for the following:

1. **Water Conservation** - Development of a more aggressive water conservation element of the DWWSP
2. **SWRCB Approval** – More efficient water use is expected to be a condition for issuing any new water right permits.
3. **Political Acceptance** –There is an element of political acceptance related to more aggressive water conservation for major water infrastructure investments.
4. **Customer Bills** – There will be a focus on water rates by decision makers and the public. Customers will benefit from knowing what actions they can take to reduce their water consumption, and thus reduce their water bills.
5. **“Carbon Footprint” Reduction** - Woodland and Davis have a growing concern regarding climate change and actions that could be taken by their cities and individuals to reduce their “carbon footprint”.

#### Phase 1A, 1B, and 1C

The public outreach program will continue throughout Phases 1A, 1B, and 1C.

The initial outreach program for Phase 1A will focus on improving decision-maker knowledge of the project (facilities, options, potential costs and rate impacts) and providing greater understanding of the project and its implications within the organizational structures of both cities. Phase 1B and 1C will focus on educating the public about the Project. The work plan for Phase 1A is more specific than for Phase 1B and 1C, because the latter phases will depend to a large extent on the success and outcomes from Phase 1A. Activities for Phases 1B and 1C should be considered conceptual at this stage and will be finally designed after the completion of Phase 1A.

To achieve outreach objectives and to keep Project implementation efforts as transparent as possible, WYA and its sub-consultant will assist the Project Partners in community/stakeholder outreach efforts by assisting in the preparation of periodic project updates for policy-makers and stakeholders, and assisting in special community meetings and/or workshops. We assume staff from each city will take the lead in updating their respective web sites with timely, relevant information on project progress, with input from WYA and its sub-consultant. WYA will also

work with staffs from each city, along with the sub-consultant, to update and maintain timely information on the Project web site.

Activities included under this task include:

#### Phase 1A

- Refine collaboration team roles and responsibilities and define resources needed to maintain the work effort in a timely manner.
- Meetings with collaborative specialist and the Partners' project managers as required to monitor progress and preparing for and participating in other meetings with Project Partner's city councils or other bodies as requested.
- Conduct up to 8 interviews, 60 minutes in length with individuals or small work groups (as appropriate) to:
  - Confirm key stakeholders, barriers, issues and interests the staff believes will need to be addressed to successful in outreach
  - Determine existing channels of outreach or other opportunities where activities can be coordinated and leveraged
  - Determine existing key goals and messages of outreach to evaluate potential for multiple objectives being met
  - Identify key issues for use in planning Staff Workshops
- Facilitate one (1) six hour City of Davis staff workshop/meeting (Utility Resources Group, Planning, Finance, etc.)
- Facilitate one (1) six hour City of Woodland staff workshop/meeting (Utility Resources Group, Planning, Finance, etc.)
- Develop work plan and approach for the joint workshop of both city councils, working with key members of the project management team
- Prepare one (1) question and answer (Q&A) fact sheet, and any other materials that may be useful in the joint workshop
- Prepare for and attend one (1) joint workshop of both city councils
- Meeting notes and documentation for each of the workshops

#### Phase 1B

- One (1) project briefing newsletter for stakeholders
- One (1) four hour community outreach workshop (in addition to City Council workshop)
- Two (2) four hour city council workshops – one each for Davis and Woodland
- Meeting notes and documentation for each of the workshops

## Phase 1C

- One (1) project briefing newsletter for stakeholders
- One (1) four hour community outreach workshop
- Meeting notes and documentation for workshop

The initial, internal assessment of needs and opportunities for both cities, working directly with key Davis and Woodland staff on the project management team. The purposes for the assessment are: (1) further refine education, outreach and engagement goals, (2) identify other relevant activities the partners are engaged in that can be leveraged to produce additional outcomes, (3) identify the stakeholder community and relevant issues and interests to better inform the outreach process, (4) clarify the nexus of outreach and other legally required input processes, such as publically noticed meetings for NEPA and CEQA review, and (5) define the decision states (what body makes what decisions when, and how the public may be involved). This is intended to guide details of subsequent outreach work.

Much of the information included in the Q&A fact sheet and newsletters will rely on information previously prepared for the 2007 Community Report, but will take advantage of updated information such as progress on pursuit of water rights, additional information on project costs, and materials developed for adjusting water rates for both cities. The fact sheets will be posted on the project's website. Consideration should be given to including the fact sheets with utility bills, and coordinating this with each City's water rate adjustment process. It is assumed that the layout-format for the project briefing newsletters will be consistent for both newsletters.

WYA will coordinate the community outreach workshops, and representatives from City leadership staff, along with an independent neutral facilitator from the Sacramento State Center for Collaborative Policy, who will facilitate these workshops. WYA will also compile meeting notes and provide appropriate documentation, such as attendance sheets, for all community outreach and City Council workshops. It is assumed that all meetings will use the same general format.

ESA will also assist the public outreach program by providing support associated with the CEQA, NEPA, and permitting process as necessary. It is understood that the primary objective of the public outreach program is to provide the decision makers and the public with an understanding of the "true cost" of water and the benefits it will provide the public. ESA will attend up to two city council workshops during Phase 1B and one community outreach workshop during Phase 1C.

Phase 1A Deliverables: Brief summary report (internal working document) from internal assessments, one work plan for subsequent joint workshops of city councils, one Q&A fact sheet, meeting collateral associated with meeting management, and agendas, meeting notes, and documentation from all workshops.

Phase 1B Deliverables: One community workshop, two City Council workshops, one project briefing newsletter, meeting collateral associated with meeting management, and agendas, meeting notes, and documentation from all workshops.

Phase 1C Deliverables: One community workshop, one project briefing newsletter, meeting collateral associated with meeting management, and agenda, meeting notes, and documentation from workshop.

## **Task 5: Project Funding**

This task involves securing both local and outside funding for this project. The local funding components of this task include an update to the project cost estimate and the subsequent rate analysis for the cities while the outside funding components include state and federal lobbying, tracking state and federal funding opportunities, and preparing and submitting grant applications.

### Phase 1A

## **LOCAL FUNDING**

### *Subtask 5.1 Updated Cost Estimate and Rate Analyses*

In 2007 Tom Pavletic of Municipal Financial Services (MFS) evaluated the financial impact of various DWWSP alternatives, and summarized his findings in a TM. The TM was intended to provide Project Partners and their rate payers a general idea of the amount and timing of water rate increases that would be required to fund the different water supply project alternatives. This work was performed by MFS as a subcontractor to WYA. The rate model incorporated construction and operation cost estimates for regional and local facilities. With the exception of the Sacramento River intake/pumping facility, the cost estimates for regional facilities were prepared by WYA. Cost estimates for the intake/pumping facility were prepared by Montgomery Watson Harza (MWH). Cost estimates for local facilities were either provided by Project Partner staff or were obtained from planning reports prepared by others.

**Updated Project Cost Estimate.** Both regional facilities and City of Davis local facilities have become better defined since completion of the 2007 financial analysis and the construction cost escalation rate has slowed significantly during the past year. This and other information will be used to refine and update construction cost estimates for both regional and City of Davis local facilities. WYA will work with engineers who have extensive experience in cost-estimating and construction of similar facilities as described below.

**Sacramento River Intake/Pumping Facility** – Mike Kenny will assist WYA in indentifying potential cost reduction measures and preparing independent preliminary construction cost estimates for this facility. Mike is an engineer with 44 years of experience in the construction industry and has been involved in the construction of numerous pump station and river intake projects.

Mike will assist WYA staff in:

- Reviewing MWH preliminary design concept drawings and identifying potential cost-reduction measures;
- Preparing preliminary construction cost estimates for the MWH preliminary design concept as currently envisioned and identifying potential cost-reduction measures;

- Participating in a workshop with City of Davis and City of Woodland representatives to discuss the preliminary construction cost estimates and identify potential cost-reduction measures.

**Regional Pipelines** – Phil Dunn will prepare updated preliminary construction cost estimates for regional pipelines. Phil is an engineer with over 45 years of experience managing, supervising and constructing public and private projects in Northern California including large diameter water transmission pipelines.

Phil will assist WYA staff in:

- Updating previous construction cost estimates for regional pipelines;
- Participating in a workshop with City of Davis and the City of Woodland representatives to discuss the preliminary construction cost estimates.

**Regional Surface Water Treatment Plant** – Dave Ewing will prepare updated preliminary construction cost estimates for the regional surface water treatment plant. Dave has been retained to provide expert consulting services or has prepared construction cost estimates for numerous water treatment facilities.

Dave will assist WYA staff in:

- Updating previous construction cost estimates for regional water treatment plant; and
- Participating in a workshop with City of Davis and the City of Woodland representatives to discuss the preliminary construction cost estimate.

The City of Woodland is currently conducting its own rate analysis using an independent consultant; therefore, the following rate analysis scope of services is designed to yield an updated project cost estimate and rate analysis for the City of Davis. The City of Woodland’s independent consultant will use the updated project cost estimate developed in this task in its rate analysis for Woodland.

**Updated Rate Analyses.** Tom Pavletic of MFS will revise the Excel model recently used to develop FY 2009/10 water rates for the City of Davis to incorporate updated facility cost estimates. The existing model will be modified to include the following:

- Updated regional and local water supply project costs for all participants
- An allocation of regional water supply project costs for all participants
- An agreed upon funding strategy for regional and local water supply project costs for the City of Davis

The revised model will include additional tables and figures as necessary to incorporate the detailed data and generate data for reports and presentations. Tom will conduct internet/telephone conferences necessary to review data and present findings, and will attend up to three meetings with the City of Davis to review and/or present the findings.

Phase 1A Deliverables: (1) Updated regional rate model with rate projections for Davis and Woodland from FY2010-11 through FY2019-20 (considering various funding alternatives), and (2) Cost reduction workshop minutes, conclusions, and updated construction cost estimate summarized in a technical memorandum.

#### Phase 1A, 1B, and 1C

### **STATE AND FEDERAL FUNDING**

#### Subtask 5.2 Funding Assistance

Identifying and securing outside funding is a major priority to minimize customer rate impacts. State and federal funding may be available to reduce the local cost burden. Investigating and securing outside funding will occur throughout Phase 1A, 1B, and 1C.

This work task will be led by Jacques DeBra from the City of Davis and Dick Donnelly from the City of Woodland. WYA will assist the Project Partners in identifying funding/financing opportunities (grants, loans and/or special appropriations) and preparing applications for project funding/financing. This will include preparation of materials for key meetings with funding agencies and local/regional elected officials that may be influential in helping to secure such funding/financing. Anticipated opportunities include:

- Safe Drinking Water Act State Revolving Fund Loans;
- Federal Government Tax Credits;
- Federal Appropriations for Regional Water Treatment Facility;
- California State Proposition 84 Funds;
- Future State water bonds;
- Use of a project delivery option that would allow the financial guarantor to provide various levels of interim financing to ease cash flow and subsequent rate impacts. This could be included as an optional sub part of the DB/DBO proposals. Further research on legal requirements, and advantages and disadvantages of this approach will be undertaken;
- Others sources that will be identified as the project proceeds.

Phase 1A, 1B, 1C Deliverables: Report on progress at monthly project management meetings (or more frequently for time-sensitive matters), and set up funding/financing opportunities for pursuit decisions.

#### **Task 6: Facilities Planning and Pre-Design**

This task includes regional and local facilities planning and design that will occur in Phase 1 of the DWWSP schedule. Regional facilities include the water supply intake, raw water transmission pipeline, regional water treatment plant (RWTP), and the treated water transmission pipelines.

Foundational tasks for the planning and pre-design of the regional facilities include all preliminary activities necessary to develop the level of information needed to facilitate bidding on the project facilities. Data collection needs include Sacramento River water quality data, soils information and shallow groundwater data, and surveying and mapping data for Project facilities, particularly pipeline easements and/or rights-of-way. Facilities pre-design is required for project implementation using the selected method of project delivery.

A detailed description of the foundational tasks is provided below.

### **SUBTASK 6.1 GENERAL FACILITIES PLANNING AND DESIGN**

Although each regional facility has its own specific planning and design needs, this general subtask encompasses planning and design efforts that are common to all, or more than one, of the regional facilities. Some general facilities planning efforts include:

#### Phase 1A, 1B, and 1C

- Facilitating discussions and negotiation of an agreement for sharing of the intake with RD 2035;
- Defining and tracking regulatory compliance requirements;

#### Phase 1B

- Analyzing and selecting the appropriate project delivery option(s);

#### Phase 1C

- Analyzing and defining system operational needs and responsibilities;
- Performing geotechnical investigations and analyzing groundwater dewatering needs and solutions;
- Updating and preparing an environmental permitting workbook and initiating work on permit applications;
- Soliciting Qualifications (issuing RFQs) from potential contractors;
- Evaluating and Ranking qualification submittals to obtain “short-lists” of three to five teams for further consideration; and
- Soliciting of Proposals (issuing RFPs) to the short-listed contractor teams.

These subtasks are described in more detail below.

Additional general facilities planning efforts that will be completed during Phase 1A and 1B under a separate contract through a grant from the Water Resources Association of Yolo County include:

- Clearly mapping easements and land acquisition requirements; and
- Completing preliminary wetlands delineations surveys.

## Phase 1A, 1B, and 1C

### *Subtask 6.1.1 Facilitating discussions with RD 2035*

WYA, together with BKS under a separate contract, will facilitate discussions with RD 2035. WYA will participate in team meetings to discuss the strategy for, and assist in an agreement with, RD 2035, for joint use of a new Sacramento River intake/pumping station. It is anticipated that ten (10) half-day meetings will be required to achieve a joint use operating agreement. Although this subtask is scheduled to begin in Phase 1A and occur largely in Phase 1B, discussions and meetings may need to continue into Phase 1C depending on the success of initial meetings.

Phase 1A, 1B, and 1C Deliverables: Ten (10) Project Partner and RD 2035 joint meetings; technical analyses and input as requested by Project Partners to advance negotiations; and other input as requested.

### *Subtask 6.1.2 Defining and tracking regulatory compliance requirements*

Dr. Rhodes Trussell, President of Trussell Technologies, is widely recognized in the industry as a water quality and treatment expert. Dr. Trussell will participate with the Project Partners and WYA in discussions and negotiations with the drinking water permitting agencies relevant to this project. The California Department of Public Health (CDPH) is a key permitting agency for construction and operation of a new surface water supply system. Early and continued coordination with the CDPH will help ensure that the resulting facilities will comply with California drinking water-related statutes and regulations. Proactive coordination with the CDPH will also help streamline the process of obtaining the permits necessary for construction and operation of a new surface water supply system. Water quality data collection (see Subtask 6.3.1) will be guided by input from CDPH regarding permit needs. WYA and Trussell Technologies will participate in meetings with the CDPH and will provide technical project-related information to demonstrate compliance with State requirements.

Phase 1A, 1B Deliverables: Meeting minutes, TM to guide other Amendment 5 tasks and regular progress reports on ongoing meetings with DPH.

## Phase 1B

### *Subtask 6.1.3 Analyzing and selecting the appropriate project delivery option(s)*

Under the direction of Diane Philips and Dick Donnelly, WYA will work with Jerry Gilbert of J. Gilbert Incorporated and Eric Petersen of Hawkins, Delafield and Wood, LLP, to complete the following work scope:

1. Compare the advantages and disadvantages of various project delivery methods that could be applied to design and construction of each of the project facilities in a TM, review the results with the Project Partners, and select the preferred delivery method for each facility. During this process, WYA will arrange meetings with the Project Partners and potential contractors/bidders that can provide alternative project delivery to solicit their input on how the contracting could be structured. This input will be analyzed by the consultant team and used to prepare an overall

comparison of benefits and constraints of each method if applied to each project facility. It is anticipated that through these initial meetings with the WYA team and the Project Partners, a list of viable options for each facility will be established, and the firms that can provide these options be clearly identified.

2. After this initial TM has been prepared and agreed to by the Project Partners, the WYA team will develop an initial outline of documents that are necessary for project delivery and for proceeding through the process of selection of a preferred contractor, and will document the findings of this work in a TM.
3. To expedite the process for moving forward with actual procurement processing, the WYA team will work with the Project Partners to outline the standard specifications that will be used to guide the development of the procurement documents. This step will involve a determination of what portions of the project facilities will be bid based on compliance with performance specifications, and what portions will use more standard technical specifications.

Phase 1B Deliverables: A TM that will define the preferred project delivery option for each project facility, the procurement steps and documentation required to implement the selection of a preferred contractor for that selected option and a list of potential contracting entities, and an outline of the procurement specifications for each facility defining requirements for performance and technically based specifications.

### Phase 1C

#### *Subtask 6.1.4 Analyzing and defining system operational needs and responsibilities*

WYA will work with the Project Partners to define anticipated diurnal and seasonal surface water demand variations, and to analyze the potential impact of these variations on regional facilities. This information will be used to assist WYA and the Project Partners in developing a regional system control plan. The plan will define information that will be used to control intake pumps, water treatment facilities, and treated water pumps. The plan will also define who is responsible for providing this information, as well as when and how this information should be provided to regional facility operations personnel.

This plan will begin to define the proposed operational characteristics of the overall regional system, and the local facilities. This will include definition of the overall process that will be used to control the raw water pumping station and fish screen. It is anticipated that there will be little or no raw water storage at the RWTP, so the system will have to be controlled on a real time basis to match plant capacity and diversions.

It is also assumed that there will be significant treated water storage at the RWTP to facilitate matching plant output and local area demands. Woodland would like to oversize the clear well at the RWTP to provide supplemental storage capacity for their distribution system. The sizing of the clear well will be defined, as will the storage components that will be sited within both the Woodland and Davis local distribution systems. The process for controlling the pumping from the RWTP clear well to each local service area will be defined.

Phase 1C Deliverables: WYA will prepare a TM that describes the overall control system defined under this work task, and will review this TM with the Project Partners. Comments generated in this review will be integrated into the draft TM and presented to the Project Partners for final approval. This document will serve as the basic instrument for describing system operation and control to the potential contracting entities in Subtask 6.1.7, 6.1.8, and 6.1.9.

*Subtask 6.1.5 Performing geotechnical investigations and analyzing groundwater dewatering needs and solutions*

Wallace Kuhl Associates (WKA) will work under subcontract with WYA to obtain soils and shallow groundwater information needed by potential contracting entities to evaluate dewatering options and develop construction cost estimates. WKA will drill and construct 40 shallow groundwater monitoring wells and prepare descriptive boring logs for each. The monitoring wells will be located at both the RWTP site and along the planned regional pipeline alignments. The monitoring wells will be spaced about 1,500 to 2,000 feet apart and will be drilled to a maximum depth of approximately 20 feet below existing site grades. Monitoring wells at the RWTP will be drilled to a maximum depth of about 50 feet below existing grades.

WYA will survey the top of the monitoring well casings and will monitor the groundwater levels of the monitoring wells for a one year period on a bi-weekly basis. Upon completion of the described groundwater data collection, WYA will prepare a TM to summarize the key findings. The TM will include a vicinity map, site plan showing the approximate monitoring well locations, logs of soil borings prepared by WKA, graphs of seasonal groundwater levels, and a discussion of anticipated groundwater dewatering conditions.

WYA will supervise the WKA work and provide technical input to WKA. WYA will provide WKA with the desired locations of the monitoring wells and standard mapping to be used by WKA for their reporting of the results of their work.

Phase 1C Deliverables: TM that includes a vicinity map, site plan showing the approximate monitoring well locations, logs of soil borings, graphs of seasonal groundwater levels, and a discussion of anticipated groundwater dewatering conditions.

*Subtask 6.1.6 Updating and preparing an environmental permitting workbook*

ESA will update the Permit Plan Workbook (workbook) initially prepared in 2008 utilizing the data collected from the Regional Pipeline Site Investigations and Constraints Analysis task described above. The workbook addresses environmental permitting for all aspects of the DWWSP and includes a master schedule. The workbook identifies the permits needed at each phase of the project implementation, the agencies involved, the information required to support each permit application, the appropriate timing of permitting actions, and the anticipated schedule for each permit. Environmental permits required for each element of the DWWSP have been identified: RD 2035 intake, transmission pipeline, and the RWTF.

ESA will revise the workbook and the included master schedule to reflect the revised project schedule, agency consultation, and the results of the constraints analysis and wetland delineation. The revised workbook will be submitted to the Project Partners and the engineering team for review and comment and will help further define the scope of work of Project Permitting. ESA will incorporate all comments into the workbook and master schedule. This scope of work provides for up to two, two-hour meetings with the Project Partners during preparation of the workbook and master schedule and up to 16 hours for agency consultation.

WYA will assist ESA in arranging and attending up to two meetings with relevant permitting agencies (e.g. U.S. Fish & Wildlife Service, U.S. Army Corps of Engineers, California Department of Fish & Game), to define permit conditions. WYA will also provide ESA with technical input, as necessary, to complete the update of the environmental permitting workbook.

Phase 1C Deliverables: (1) Draft Environmental Permitting Plan Workbook. Electronic copies and five (5) hard copies; (2) Revised Permit Plan Workbook. Electronic copies, five (5) hard copies, and five (5) CD's; and (3) Agency Consultation.

*Subtask 6.1.7 Soliciting Interest and Qualifications (issuing RFQs) from potential DB/DBO entities*

Using the list developed in Subtask 6.1.3, a formal solicitation of interest and request for qualifications will be issued to prospective entities interested in bidding on one or more of the project facilities. Although some interaction between potential bidders and the owner is desired, a DB RFQ would be more limited than a DBO RFQ. It is expected that as many as five firms and/or groups of firms will submit qualifications in response to the RFQ for the DBO projects. Preliminary discussions with potentially interested parties will be held to help develop the outline for future project specifications and performance requirements and the final layout and design of the bidding process itself.

WYA will prepare the RFQ document and will assist the Project Partners in the evaluation and ranking of respondents. The DB/DBO bid solicitation process will be structured to maintain creativity and cost-competitiveness while maintaining project quality and performance guarantees.

Phase 1C Deliverables: DB/DBO Solicitation RFQ with related background information. The background information will include preliminary intake/pumping station, RWTP, and regional pipeline "design criteria packages", Sacramento River water quality data summary TM, soils and shallow groundwater data summary TM, survey and mapping results, and regional pipeline pre-design documents.

*Subtask 6.1.8 Evaluating and Ranking qualification submittals to obtain "short-lists" of three to five teams for further consideration for each of the DB or DBO projects*

The criteria for the evaluation and ranking of qualification submittals will be primarily the qualifications of individuals proposed on the project, demonstrated team success and integrated performance, and the potential availability of key people at the times they are needed. Ranking criteria will also be developed for creating the shortlist. Working with the Project Partners, the WYA team will assist in evaluation and ranking of the submittals, and the development of a short-list of interested parties.

Phase 1C Deliverables: A summary comparison of DB/DBO firm qualifications including a “short-list”.

*Subtask 6.1.9 Soliciting of Proposals (issuing RFPs) to the short-listed teams*

The WYA team will prepare the RFP document and will assist the Project Partners in the evaluation and ranking of respondents. The RFP document will be structured to allow prospective DB/DBO entities to propose phasing options that would reduce initial construction costs. The RFP document will also be structured so that prospective DB/DBO entities may include one, two, or all three projects in their DB or DBO proposal. The DB proposals will be compared to the DBO proposals for each element to determine the most cost-effective approach for the Project Partners for the entire project. While bidders are preparing proposals, WYA will host a meeting between bidders and permitting agencies.

Phase 1C Deliverables: DB/DBO Solicitation RFP with related background information and permitting agency meeting minutes. Background information will include intake/pumping station, RWTP, and regional pipeline “design criteria packages”, Sacramento River water quality data summary TM, soils and shallow groundwater data summary TM, survey and mapping results, and regional pipeline pre-design documents.

*Subtask 6.1.10 Special Status Species and Cultural Resources Investigations*

ESA botanists will conduct a preliminary map and field survey for special-status plant species identified as having potential to occur within the study area. Surveys will be focused in areas previously identified as potentially supporting special-status plants. Locations of special-status plant populations will be identified and labeled on the map book prepared for the constraints analysis. This subtask does not include protocol level surveys and will only be used as a constraints exercise to help refine the preferred pipeline alignment.

ESA cultural resource specialists will perform an archival records search of the proposed regional pipeline alignment and RWTF facilities including review of records at the Northwest Information Center at Sonoma State University and Yolo County archives to identify known culturally sensitive resources and recorded sites. cursory field surveys will also be conducted by ESA to identify cultural resources in and immediately adjacent to the project area. Known areas of sensitive cultural resources will be identified on the map book prepared for the constraints analysis and will be used to guide the final alignment design and initial permit screening.

This task will be used as a constraints exercise to help refine the preferred pipeline alignment and provide preliminary permit support as identified in the project permitting Subtask 6.1.11, described below.

Phase 1C Deliverables: (1) Draft Technical Memorandum – Biological and Cultural Resources Inventory for the Regional Pipeline (three (3) copies); and (2) Revised/Final Technical Memorandum (five (5) copies).

### *Subtask 6.1.11 Project Permitting*

Upon completion of the Permit Plan Workbook and preliminary agency consultation, ESA will revise the Scope of Work for the overall project permitting needs. One of the overriding key assumptions used to develop the permitting needs for the project is the concept that DWWSP is comprised of two separate project components (water side and land side) each of which will be considered a single and complete project requiring separate permitting processes with unique owners/applicants. The water side project involves the construction of a new intake structure which is, and will be owned by RD 2035. The land side project involves the construction of an untreated water conveyance pipeline, regional water treatment plant, local storage and distribution facilities, and new groundwater wells which would be owned by the DWWSP. Should there be a need to consider the water side and land side components as one project, the scope described below will change. In addition, the level of effort required to obtain project permits also varies depending on the preferred alignment selected. The following best describes the permitting effort required using existing available information.

ESA will assist the Project Partners in obtaining compliance with the following:

#### 1. Federal Endangered Species Act Compliance, Section 7

ESA will prepare a biological assessment (BA) for use during consultation with USFWS for Project effects on the giant garter snake, Swainson's hawk, valley elderberry longhorn beetle as well as the potential for red-legged frog (*Rana aurora draytonii*), and California tiger salamander (*Ambystoma californiense*). The BA will be submitted to the Corps with the PCN who in turn will use the BA to initiate Section 7 consultation with USFWS. ESA will provide three copies of the BA for distribution to the project team.

Phase 1C Deliverables: (1) Revised/Final Biological Assessment. Electronic copies, five (5) hard copies, and five (5) CD's; and (2) Delivery of BA and PCN to the Corps.

#### 2. California Endangered Species Act, Section 2080.1 Consistency Determination

Fish and Game Code Section 2080.1 allows an applicant who has obtained a federal incidental take statement pursuant to a federal Section 7 consultation or a federal Section 10(a) incidental take permit to notify the Director in writing that the applicant has been issued an incidental take statement or an incidental take permit pursuant to the federal Endangered Species Act of 1973. The applicant must submit the federal opinion incidental take statement or permit to the Director of Fish and Game for a determination as to whether the federal document is "consistent" with CESA.

ESA will prepare a consistency determination request for submittal to the Director of Fish and Game. The draft request will be provided to the DWWSP Partners for review and upon approval will submit to DFG with the BO.

### *Schedule and Fees*

Receipt of the application by the Director starts a 30-day clock for processing the Consistency Determination. There is no fee for this process.

Phase 1C Deliverable: Preparation of an incidental take statement or an incidental take permit to director of California Department of Fish and Game.

### 3. Cultural Resources Report, National Historic Preservation Act

To meet the requirements of the National Historic Preservation Act (NHPA), as overseen by the State Historic Preservation Officer (SHPO) and the Office of Historic Preservation (OHP), and to initiate consultation with the SHPO as part of the Section 106 review Process, ESA will update and perform the following tasks:

- conduct a record search at the California Historical Resources Information System (CHRIS) at the North Central Information Center at California State University, Sonoma;
- consult with the Native American Heritage Commission to determine if project footprints are known to be of particular concern to local Native Americans;
- conduct a preliminary archaeological assessment of the potential for buried archaeological sites; and
- conduct a pedestrian survey of the APE.

The results of these surveys and research will be summarized in a Draft and Final Cultural Resources Report, for distribution to the project team.

Phase 1C Deliverables: (1) Draft/Final Cultural Resources Report. Electronic copies, five (5) hard copies; and (2) five (5) CD's.

### 4. Section 404 Clean Water Act and Section 10 of the Clean Water and Harbors Act

Section 404 of the Clean Water Act requires approval prior to discharging dredged or fill material into the waters of the United States. Under Section 10 of the Rivers and Harbors Act of 1899, the construction of structures in, over, or under; excavation of material from; or deposition of material into navigable waters are regulated by the Corps. Navigable waters typically have the same boundaries as, or lie within the boundaries of, waters of the United States subject to jurisdiction under Section 404 of the Clean Water Act. Larger streams, rivers, lakes, bays, and oceans are navigable waters that may represent all or a part of waters of the United States. Isolated wetlands are typically not part of navigable waters. Individual permits are issued for projects which affect greater than 0.5 acres of wetlands or waters of the U.S. and following a full public interest review of the permit application.

Due to the complexity of the of the project and an assumption that project impacts to wetland and/or waters of the U.S. will exceed 0.5 acres, it is assumed that the project will require an IP. If it is determined that the project may be authorized under a NWP, ESA will draft a new scope of work.

ESA will prepare an IP permit application package for submittal to the Corps. The application package will include the following components:

- Cover letter;
- Completed application (ENG Form 4345);
- Project maps and graphics;
- Mailing or distribution list;
- Wetland delineation and verification letter;
- Section 404(1)(b) alternatives analysis;
- Mitigation and monitoring plan;
- Biological assessment; and
- Cultural resources assessment.

#### *Schedule and Fees*

Individual permits are issued following a full public interest review of an individual application. After evaluating all comments and information received, final decision on the application is made, based on the outcome of a public interest balancing process, and wherein a permit will be granted unless the proposal is found to be contrary to the public interest. Although processing time for an individual permit can be as short as 60 to 120 days the process typically takes 6 months to a year.

The Corps acknowledges and processes each application in the order it receives them. After the Corps completes its review of a project and determines that a project is in the public interest and complies with the guidelines, the applicant must sign and return the draft permit with the appropriate fee. The Corps goal is to reach a decision regarding permit issuance or denial within 60 days of receipt of complete application. However, some complex activities, issues, or requirements of law may prevent the district engineer from meeting this goal.

The Corps of Engineers is required by federal law to consult with state and federal wildlife agencies regarding any impacts of a project on aquatic habitats and on federal endangered species. If the Corps receives no objections during the 30 day circulation period, the District Engineer may issue the permit within 30 to 90 days. If individuals, public agencies, special interest groups, or the Corps raises major objections, the permit decision may be made in 90–120 days, or possibly longer.

Permit fees for processing a Section 10 application are either \$10.00 or \$100.00. If an individual permit is required and because this project is considered complex, it is anticipated the fee would be \$100.00.

Phase 1C Deliverable: Section 404 Clean Water Act and Section 10 of the Clean Water and Harbors Act Individual Permit application package for submittal to the Corps.

## 5. Section 401, Clean Water Act

Section 401 of the CWA requires that the discharge of dredged or fill material into waters of the United States, including wetlands, does not violate state water quality standards. As required by Section 404, water quality certification must be obtained or waived for permit compliance.

ESA will prepare a Section 401 water quality certification application package that could be sent to the Central Valley Regional Water Quality Control Board (RWQCB) for the proposed project. ESA will revise the draft version of the application no more than twice based on comments from the DWWSP Partners and provide the DWWSP Partners with one hard copy of the final application. The Central Valley RWQCB also requires that the Project's approved environmental document be submitted with the application package, to enable a determination that issuing a water quality certification and waste discharge requirements is covered under CEQA.

### *Schedule and Fees*

Upon submittal of the water quality certification notification, the RWQCB has 30-days to notify the applicant as to whether the application is complete. If the applicant does not receive notification from the RWQCB within 30 days of the submittal date, the applicant may assume that project activities have been certified and proceed with the project unless other agency permits are required. Once the RWQCB deems the application complete, it may request additional information such as a Spill Response Plan or evidence showing compliance with appropriate requirements of a water quality control plan. A certification is considered valid once the RWQCB receives the notification with the applicant's signature. Thus, upon notification that the application is complete, the review and approval process could require an additional 30 to 45 days for completion.

The RWQCB could deny the certification of the project if the project does not meet water quality standards or procedural requirements. However, if the deficiency is addressed and considered adequate by the RWQCB, the application for water quality certification may be reconsidered. This would require the resubmission of the notification and adherence to the same 30 to 45 day approval process. The application review process could take up to 60 days.

If the project qualifies as a low impact discharge (less than 0.1 acre) a base application fee of \$500, provided by the DWWSP Partners, must be included in the package. If the fill exceeds 0.1 acre, a base application fee of \$500.00 in addition to the discharge area in hundredths of an acre x \$21.50, provided by the DWWSP Partners, must be included with the package.

Phase 1C Deliverable: Section 401 water quality certification application package to the Central Valley RWQCB.

## 6. Section 1602 California Fish and Game Code

A streambed and lakebed alteration agreement (SAA), in compliance with Section 1602 of the California Fish and Game Code, is required when projects will substantially divert, obstruct, or change the natural flow of a river, stream or lake; substantially change the bed, channel, or bank of a river, stream, or lake; or use material from a streambed.

ESA will prepare an application package for a streambed and lakebed alteration agreement that could be sent to DFG, Bay-Delta Region. ESA will revise a draft version of the application no more than twice based on comments from the DWWSP Partners. A copy of the certified final CEQA compliance document including the Notice of Determination will be included with the application package.

### *Schedule and Fees*

An application fee as determined by the DFG Fees for Lake and Streambed Alteration Agreements (Cal. Code Regs., tit. 14, § 699.5), provided by the DWWSP Partners, must be included in the package. The amount of the application fee will be dependent upon the cost of the project.

Upon submittal of the SAA, CDFG has 30 days in which to provide notification in writing whether the application is complete, whether the project will require a SAA, and if so, what avoidance and/or mitigation measures should be incorporated into the project. The applicant would then have 14 days to submit in writing to the DFG that they accept the measures. The DFG would then incorporate the measures into a draft SAA and submit it to the applicant for its review and signature. Once signed, the SAA is considered complete and project activities may proceed. Thus, upon SAA submittal, the approval process could require 30 to 60 days for completion.

Phase 1C Deliverable: Application package for a streambed and lakebed alteration agreement to CDFG.

## 7. NPDES General Storm Water Permit and Storm Water Pollution Prevention Plan

The State Water Resources Control Board (SWRCB) allocates rights to the use of surface water and, with the regional boards, protects surface, ground, and coastal waters throughout the state. The SWRCB has adopted a *General Construction Activity Storm Water Permit* (General Permit) for storm water discharges associated with any construction activity where at least one acre of land area is disturbed. The General Permit requires the site owner to notify the State, to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP), and to monitor the effectiveness of the SWPPP. The SWPPP must also address post-construction control of pollutants in storm water.

ESA will prepare an application package for a NPDES General Permit and file a Notice of Intent (NOI) with the SWRCB. The application package application will describe the wastes to be discharged, the setting for the discharge, and the method of treatment or containment. Although development of a Storm Water Pollution Prevention Plan (SWPPP) is not included in this scope of work, upon request ESA is available to provide that task.

### *Schedule and Fees*

Upon filing, the State or Regional Water Board staff reviews the application for completeness, and determines if the discharge will be permitted or prohibited. Staff then prepares a draft and sends out a notice for a 30-day public comment period, and the discharger must publish the public notice for one day in the largest circulated paper in the municipality or county and submit proof of posting or publication to the Regional Water Board within 15 days after posting or publication.

After the 30-day public notification period, the Regional Water Board holds a public hearing, and the State or Regional Water Board may adopt the permit with or without modification, or not adopt it at all. USEPA has 30 days to object to the draft permit, and the objection must be satisfied before the permit becomes effective.

The permit issuance process takes approximately six months, but may take longer depending upon the nature of the discharge. The NPDES permit is subject to annual fees which are based upon the level of threat to water quality and the complexity as determined by the State or Regional Water Board. Fees can range from \$800 to \$42,000.

Deliverable: Application package for a NPDES General Permit and filing of a Notice of Intent (NOI) with the SWRCB.

## **WATER SUPPLY INTAKE**

The objective of this effort will be to advance the design of this facility to a point where it is best positioned to be eligible for consideration in applications for outside funding opportunities. Pre-design of the water supply intake has been completed by MWH; however there may be more a cost-effective approach for the implementation of this facility.

### Phase 1C

#### *Subtask 6.2.1 Sacramento River Intake/Pumping Station Construction and Performance Requirements*

WYA will develop an intake/pumping station “final design criteria package” that will include design, construction, and operational quality requirements, fish-screening criteria, and permitting requirements to the level required to match the contract delivery option selected for the intake. Pre-design work completed by MWH and results of the cost reduction workshop will ultimately be provided to prospective contracting entities as background support materials. WYA will retain MWH in an advisory role to answer any questions related to their pre-design work on the intake and pumping station.

The design criteria package will be structured to provide enough detail to:

- Provide a joint use intake/pumping station facility that meets California Department of Fish and Game (DFG) and National Marine Fisheries Service (NMFS) requirements;
- Provide a screening system capable of diverting a maximum of 400 cfs, and pumping facilities with a firm pumping capacity of 80 cfs for DWWSP use, and 400 cfs for RD 2035 use; and

- Encourage creativity, innovation, and competition in the proposal phase for contractors to obtain the most cost-effective solution while maintaining quality in design and construction.

The design criteria package for the intake/pumping station will be included in the intake bid documents developed in Subtask 6.2.2 and bidding package created in Subtask 6.1.9.

Phase 1C Deliverable: Intake/pumping station pre-design and final design criteria package.

*Subtask 6.2.2 Sacramento River Intake/Pumping Station Bid Document Development*

Sacramento River intake/pumping station bid documents will include: quality standards, approximate 15% level of design for the intake/pumping station, design, timeline, and performance requirement criteria.

Phase 1C Deliverable: Bid documents for intake

**REGIONAL PIPELINES**

Some of the regional pipeline planning effort will be completed in Phase 1A and 1B under a separate contract with the Water Resources Association of Yolo County. This independent work effort will include surveying and mapping services necessary to define the location of existing property boundaries and rights-of-way with respect to preliminary pipeline horizontal alignments; and delineation of wetlands within a 500-foot wide corridor centered on the anticipated pipeline alignments using the latest guidelines from the Corps of Engineers to identify waters subject to Section 404 of the Clean Water Act. The remaining work on the regional pipeline work will not commence until Phase 1C. This work will include both the raw water pipeline, and the treated water transmission mains.

Phase 1C

*Subtask 6.3.1 Regional Pipeline Pre-Design*

After the foundational geotechnical tasks are complete, the requirements for the bid documents can begin to be developed. Under this task, requirements and bid documents will be developed for the regional pipelines that match the proposed project delivery option selected in Subtask 6.1.3.

WYA will prepare a Basis of Design Report (BODR) that will include the following:

- An updated alignment analysis that incorporates any new information to refine the preliminary work completed under contract with the Water Resources Association of Yolo County
- Geotechnical evaluation including corrosivity analysis and evaluation
- Hydraulic analysis for pipeline sizing and materials selection
- Identification of permits required for pipeline construction
- Identification of property acquisition requirements

## Regional Pipeline Site Investigations and Constraints Analysis

Building on the work ESA completed for the *Draft Davis-Woodland Water Supply Project Environmental Impact Report* (2007), ESA will review relevant biological resources databases, aerial photographs and other available information as well as conduct a field reconnaissance to compile up-to-date baseline information for the proposed project pipeline alignment from the RD 2035 intake to the Regional Water Treatment Facility (RWTF) and from the RWTF to the Road 25A/Road 103 Intersection. This information will be used to identify the types and potential locations of waters of the United States including wetlands as well as habitats for special-status species located on or adjacent to the project areas. All information obtained during this task will be mapped on United States Geological Survey quadrangle maps and aerial photographs and compiled into a single technical memorandum (memo); the maps will also be used during the wetland delineation work performed under the WRA contract.

ESA will provide updated maps of environmental constraints information for the pipeline corridor and meet with the project sponsors and WYA engineering team to review this information. ESA will then conduct a field reconnaissance with the project engineering team to walk the alignment and discuss environmental constraints and opportunities for avoidance. Up to four (4) days of field effort for two ESA staff has been budgeted. ESA assumes that the Project Partners will arrange for site access to all areas. This task does not include protocol-level surveys for special status species. If needed to support subsequent permit applications, ESA will submit a separate scope of work for such surveys to the project sponsors for review and approval.

Phase 1C Deliverable: Pipeline BODR criteria package

### *Subtask 6.3.2 Regional Pipeline Construction and Performance Requirements*

Using the BODR, WYA will develop a regional pipeline “design criteria package” for use in the bid documents. The design criteria package will include the drawings, specifications, plat maps, and information obtained from meeting with the agencies from whom permits will be required as follows:

- 30 percent complete plan and profile construction drawings at a horizontal scale of 1”= 40’ and a vertical scale suitable for the terrain. Drawings will include the horizontal locations of known potential underground conflicts (potholing will not be performed at this time), and construction notes that include design, materials, and construction requirements.
- Specifications for items where minimum requirements must be maintained.
- Preliminary plat maps for anticipated property acquisition work.
- Meeting notes from meetings with the permitting agencies, and application materials needed to initiate permits required for pipeline construction.

The design criteria package for the regional pipelines will be included in the regional pipeline bid documents developed in Subtask 6.3.3 and in the contract materials for the RFP created in Subtask 6.1.9.

Phase 1C Deliverables: Thirty percent plan and profile drawings and required technical specifications for use in the bid documents and RFPs.

### *Subtask 6.3.3 Regional Pipeline Bid Document Development*

Regional pipeline bid documents will include: quality standards, approximate 30% level of design for the pipelines, timeline, and performance requirement criteria.

Phase 1C Deliverable: Bid documents for pipelines

## **REGIONAL WATER TREATMENT PLANT (RWTP)**

### Phase 1A, B and C

#### *Subtask 6.4.1 Sacramento River Water Quality Data Collection*

WYA will collect Sacramento River water samples at the RD 2035 diversion point and deliver these to a laboratory for analysis. The results will be compiled into a water quality database. The location-specific water quality data will be needed by potential contractors to determine treatment requirements for compliance with Drinking Water Regulations and water quality-related performance guarantees. In addition to collecting water quality data, this subtask will include compiling and summarizing water quality data from other locations on the Sacramento River including intakes for the cities of West Sacramento and Sacramento. WYA will also research and summarize the publicly available water quality data that are relevant to the DWWSP. The collected data from the RD 2035 diversion point will supplement information obtained from the other data sources, and the databases will be summarized and compared in a water quality TM.

Comprehensive water samples will be collected monthly from the RD 2035 intake beginning in May 2009. California Laboratory Services (CLS) will be used for laboratory analysis of all water samples collected under this task. The results of the meetings with CDPH described under Subtask 6.1.2 will help guide the water quality analyses, but at this time it is anticipated that the analyses will include at least 24 tests for *Cryptosporidium* and 18 tests for all Title 22 constituents including general physical parameters, multiple metals, pesticides, general minerals, total and fecal coliform, and volatile organic compounds. In addition, we will select about 10 contaminants of emerging concern (CEC), including several endocrine disrupting chemicals, to measure based on upstream discharges and runoff. The *Cryptosporidium* tests will be conducted throughout the two year monitoring period, while the Title 22 and CEC constituents will only be analyzed in samples collected during the first eighteen months of monitoring. To better characterize winter sediment loads in the Sacramento River, weekly sampling for an abbreviated list of constituents will occur during the first winter (November 2009-April 2010) after periods of significant rain events. This additional weekly sampling is expected to occur up to eight times during the winter. Constituents sampled for weekly will likely include turbidity, total suspended solids, iron, manganese, a short-list of pesticides of concern, and possibly *Cryptosporidium*. WYA may recommend longer term sampling and analysis of the Title 22 constituents, as a supplemental subtask, if the databases reveal the need to characterize any long-term trends in water quality.

Phase 1A, 1B and 1C Deliverables: Water quality sampling plan and water quality TM summarizing available historical data and the results of the monitoring program.

## Phase 1C

### *Subtask 6.4.2: Regional Water Treatment Plant (RWTP) Construction and Performance Requirements*

After the foundational subtasks of collecting water quality data and preparing cost estimates are complete, the requirements for the bid documents can be more fully defined. Under this task, performance requirements will be developed for the RWTP to match the project delivery options selected for this facility. Preparing design criteria for this facility is the key activity of this task.

WYA will develop a water treatment plant “design criteria package” that will include design and construction quality requirements and treated water quality performance standards. This work will be conducted by the WYA staff, supported by Jerry Gilbert, Dr. Rhodes Trussell, President of Trussell Technologies, and Eric Petersen. All three have extensive experience with alternative project delivery options.

The design criteria package will be structured to provide enough detail to:

- Provide a water treatment facility that produces high-quality water meeting or exceeding California and EPA primary and secondary drinking water standards;
- Encourage creativity, innovation, and competition in the proposal phase to obtain the most cost-effective solution while maintaining quality in design, construction, and operation;

The design criteria package for the RWTP will be included in the RWTP bid documents developed in Subtask 6.4.3 and in the RFP created in Subtask 6.1.9.

Phase 1C Deliverable: RWTP design criteria package

### *Subtask 6.4.3 Regional Water Treatment Plant (RWTP) Bid Document Development*

WYA will prepare bid documents for the RWTP that include design, timeline, and performance requirement criteria.

In addition, it is expected that the Project Partners will need to execute a service contract with a single entity responsible for the design, permitting, construction, start-up and testing of the RWTP. The entity will also be responsible for the operation, maintenance, and repair of these facilities. Under this subtask, WYA will prepare a draft service contract for the RWTP.

Phase 1C Deliverables: Bid documents and draft service contract.

## **Cost of Services**

Estimated costs of each scope item are summarized in Table 1.

Table 1. DWWSP Cost Estimate May 2009 - June 2011 Summary

Task#	Task Description	May - October 2009	November 2009 - March 2010	April 2010 - June 2011	Phase 1 Total Cost
		Phase 1A Total Cost	Phase 1B Total Cost	Phase 1C Total Cost	
<b>1</b>	<b>Program Management</b>				
1.01	Meeting Preparation and Attendance	88,479	54,923	160,279	303,681
1.02	Subconsultant Coordination	16,538	13,598	52,022	82,158
1.03	Project Scheduling	3,675	2,940	16,317	22,932
1.04	Construction Cost Estimating	5,450	4,360	21,924	31,734
	<b>Subtotal</b>				<b>440,505</b>
<b>2</b>	<b>JPA Agreement</b>				
2.01	Technical Input	19,284	11,571		30,855
	<b>Subtotal</b>				<b>30,855</b>
<b>3</b>	<b>Water Supply</b>				
3.01	Water Rights	40,428	28,732	11,069	80,229
3.02	Summer Water		36,137	266,195	302,332
3.03	Conservation	10,513	10,559	44,171	65,243
	<b>Subtotal</b>				<b>447,804</b>
<b>4</b>	<b>Public Outreach Program</b>				
4.01	Literature Preparation	18,405	8,713	22,582	49,700
4.02	Workshop Preparation	26,974	13,598	14,008	54,580
4.03	Meeting Attendance	35,875	22,833	12,474	71,182
4.04	Project Management	4,755	2,335	2,449	9,539
	<b>Subtotal</b>				<b>185,001</b>
<b>5</b>	<b>Project Funding</b>				
5.01	Updated Davis Rate Analysis	117,456			117,456
5.02	State and Federal Funding Strategy Assistance	21,568	47,288	88,365	157,221
	<b>Subtotal</b>				<b>274,677</b>
<b>6</b>	<b>Facilities Planning and Pre-Design</b>				
6.01	General Facilities Planning and Desigr	60,357	113,879	696,422	870,658
6.02	Water Supply Intake			316,515	316,515
6.03	Regional Pipelines	40,648		528,515	569,163
6.04	RWTP	60,397	64,709	208,506	333,612
	<b>Subtotal</b>				<b>2,089,948</b>
	<b>WYA+Subconsultant TOTAL COSTS <sup>(a)</sup></b>	<b>570,802</b>	<b>436,175</b>	<b>2,461,813</b>	<b>3,468,790</b>
BKS	<i>JPA Agreement</i>	20,000	20,000	10,000	50,000
	<i>Water Rights Permit</i>	20,000	10,000	20,000	50,000
	<i>Summer Water Purchase</i>	0	30,000	70,000	100,000
	<i>Negotiations with RD 2035</i>	20,000	20,000	20,000	60,000
	<i>Additional Services</i>	0	0	60,000	60,000
	<b>BKS TOTAL COSTS</b>	<b>60,000</b>	<b>80,000</b>	<b>180,000</b>	<b>320,000</b>
	<b>OVERALL TOTAL COST ESTIMATE <sup>(b)</sup></b>	<b>630,802</b>	<b>516,175</b>	<b>2,641,813</b>	<b>3,788,790</b>

(a) WYA total cost includes cost for all subconsultants. Subconsultant costs are as follows

Subconsultant	Phase 1A Total Cost	Phase 1B Total Cost	Phase 1C Total Cost	Phase 1 Total Subconsultant Cost
J. Gilbert Incorporated	17,050	24,750	92,400	134,200
Environmental Science Associates	95,598	58,926	490,543	645,067
Trussell Technologies	33,000	33,000	33,000	99,000
Sacramento State Center for Collaborative Policy	53,020	18,700	8,800	80,520
California Laboratory Services	41,580	45,430	64,790	151,800
Hawkins, Delafield and Wood, LLP	2,200	11,000	59,400	72,600
Montgomery Watson Harza	0	0	16,500	16,500
Municipal Financial Services	27,500	0	0	27,500
Wallace Kuhl Associates	0	0	121,000	121,000
<b>Total WYA Subconsultant Cost</b>	<b>269,948</b>	<b>191,806</b>	<b>886,433</b>	<b>1,348,187</b>

(b) The project cost will be shared among the Project Partners according to the following table

Project Partner	May - Oct. 2009	Nov. 2009 - Mar. 2010	Apr. 2010 - Jun. 2011	Phase 1 Total
	Phase 1A Total	Phase 1B Total	Phase 1C Total	
Davis	314,250	200,641	1,132,434	1,647,324
Woodland	256,552	235,535	1,329,379	1,821,466
UCD	60,000	80,000	180,000	320,000
<b>TOTAL</b>	<b>630,802</b>	<b>516,175</b>	<b>2,641,813</b>	<b>3,788,790</b>