

**SEASIDE GROUNDWATER BASIN WATERMASTER
SPECIAL MEETING AGENDA**

**WEDNESDAY, JANUARY 31, 2007, 1:30 P.M.
SEASIDE CITY HALL
440 HARCOURT AVENUE
SEASIDE, CALIFORNIA**

WATERMASTER BOARD:

City of Seaside – Mayor Ralph Rubio, Chairman
Laguna Seca Subarea Landowner – Director Bob Costa, Vice Chairman
Monterey Peninsula Water Management District – Director Michelle Knight, Secretary
City of Monterey – Vice Mayor Jeff Haferman
City of Sand City – Mayor David Pendergrass
California American Water – Director Steve Leonard
City of Del Rey Oaks – Mayor Joseph Russell
Monterey County/Monterey County Water Resources Agency - Supervisor Jerry Smith,
District 4
Coastal Subarea Landowner – Director Paul Bruno

I. CALL TO ORDER

II. ROLL CALL

III. PUBLIC PARTICIPATION/ ORAL COMMUNICATIONS

Oral communications is on each meeting agenda in order to provide members of the public an opportunity to address the Watermaster on matters within its jurisdiction. Matters not appearing on the agenda will not receive action at this meeting but may be referred to the Watermaster executive officer or may be set for a future meeting. Presentations will be limited to three minutes or as otherwise established by the Watermaster. In order that the speaker may be identified in the minutes of the meeting, it is helpful if speakers state their names. Oral communications are now open.

IV. SPECIAL MEETING BUSINESS

- A. Consider approving Seaside Groundwater Basin Watermaster Seawater Sentinel Wells Work Plan and associated Scope of Work submitted by Martin Feeney, a copy of which is attached.
- B. Consider authorizing Watermaster executive officer to prepare and execute a contract, not to exceed \$850,000 (or another amount in the discretion of the Watermaster), for the purposes of funding the activities set forth in the Sentinel Wells Work Plan, a copy of which is attached.

- C. Consider the proposed contract from the Monterey Peninsula Water Management District, (MPWMD) and Monterey County Water Resources Agency, (MCWRA) for the project management portion of the Seaside Basin Monitoring and Management Program.

V. CLOSED SESSION

As permitted by Government Code Section 54956 et seq. of the State of California, the Seaside Basin Watermaster Board of Directors may adjourn to Closed Session to consider specific matters.

- A. Public Employee Performance Evaluation: Government Code Section 54957

- 1. Title: Chief Executive Officer

VI. NEXT MEETING DATE – FEBRUARY 7, 2007

VII DIRECTOR’S REPORTS

VIII ADJOURNMENT

This agenda was posted at the City Clerks Office at the City of Seaside on Friday, January 26, 2007 per the Ralph M. Brown Act. Government Code Section 54954.2(a). The agenda was forwarded via e-mail to the City Clerks of Monterey, Sand City and Del Rey Oaks; the Clerk of the Monterey Board of Supervisors; the Clerk to the Monterey Peninsula Water Management District; the Clerk at the Monterey County Water Resources Agency and the California American Water Company for posting on January 26, 2007.

SEASIDE GROUNDWATER BASIN WATERMASTER
SEAWATER SENTINEL MONITORING WELLS
WORKPLAN
January 26, 2007

INTRODUCTION

As part of the court decree, the Seaside Groundwater Basin Watermaster (Watermaster) is required to install a series of coastal monitoring wells for the purpose of enhancing the existing network of monitoring wells that can detect seawater intrusion into the Seaside Basin. As part of the judge's review of the Watermaster's progress, he imposed a set of deadlines for implementation of this work. The timelines set by the judge are aggressive and will be difficult to achieve without refocusing the scope and goals of this work. This document intends to detail a revised approach to the work, propose preliminary well locations, identify required permits, and suggest an achievable schedule. A preliminary estimate of costs is also provided.

BACKGROUND

The Watermaster has initiated a multi-faceted Basin Monitoring and Management Program (MMP) that includes data collection, management and analysis, ground water modeling, and hydrogeologic analysis. This program also includes the installation of monitoring wells for purposes of refining basin hydrogeology and water quality monitoring. Because of the wells dual purpose of refining basin hydrogeology and water quality monitoring, the magnitude of the monitoring well program was large and expensive. While the insight and data from these wells may be necessary in the long run, achieving the primary goal of detecting seawater intrusion can be achieved with well designs that focus on the water quality monitoring. Hydrogeologic data and understanding that are developed as part of implementation of the coastal monitoring wells will be useful, but not the primary purpose. The decoupling of the dual purposes for installing monitoring wells allows redesign of the coastal monitoring wells, reducing their cost and speeding implementation.

The MMP approved by the judge also includes the construction of several inland monitoring wells to further the understanding of the groundwater basin. The purpose of these wells is to provide better understanding of the structure, hydrostratigraphy, and water level conditions of the inland portions of the basin. These inland wells are not part of this work plan as the purpose of these wells is significantly different than the coastal monitors.

Previous Approach

The previous approach consisted of six monitoring well clusters. Each cluster would have four monitoring wells completed to various depths. One borehole would be drilled to the Monterey Formation and completed toward the lower portion of the aquifer system, one would be completed in the upper Santa Margarita Sandstone, and two would be completed in the overlying Paso Robles Formation. It was assumed that the deeper boring would extend as deep as 1,500 to 2,500 feet. Each well was to be constructed of PVC casing with gravel pack and perforations in the appropriate hydrostratigraphic interval. The deeper well was to be 3-inch diameter while the other wells would be 2-inch diameter. The drilling cost estimate included site preparation, well construction and development, fluid/cuttings disposal and site restoration. Total cost of the drilling program was estimated \$3.8 million. The actual well sites were undetermined. The

estimated costs did not include site selection, design, permitting, site acquisition, or construction management. These costs were estimated at approximately \$550,000 which bring total project cost to \$4.35 million.

The proposed approach would have allowed collection of the following data:

- Water levels in the upper and lower Santa Margarita Sandstone
- Water levels in two discrete hydrostratigraphic intervals in the Paso Robles Formation
- Water Quality sampling of the Santa Margarita Sandstone and Paso Robles Formation intervals
- Conductivity/Resistivity (Induction) surveys of entire sediment column providing indirect measurement of water quality and water quality changes.
- Base of water bearing sediments – Depth to Monterey Formation

Revised Approach

With the exception of distilled water, all water contains some level of dissolved minerals or salts. Typical drinking water contains less than 1,000 part per million of dissolved salts whereas seawater contains approximately 35,000 parts per million of salts. Unlike organic contaminants which degrade water with concentrations measured in parts per billion; degradation of water by seawater is the result of contamination on the parts per million or even parts per thousand basis. The addition of more salts to the water, as the result of mixing with seawater, changes the physical properties of the water such as the density of the water and, most relevant to the subject project, the electrical properties of the water.

Distilled water is essentially electrically non-conductive; with increasing amounts of salinity water becomes increasingly more conductive. As such, the electrical conductivity of water can be used to infer the salt concentration. The revised work plan relies on this principal.

The change in electrical properties with increasing salinity makes the detection of seawater contamination into an aquifer relatively easy. As the water within the aquifer becomes more saline due to the intrusion of seawater, the electrical conductivity of the formation containing the water increases relative to the value measured when the aquifer was filled with native ground water.

The revised work plan utilizes single-well monitoring sites (as opposed to the multiple wells at each site described in the existing plan). The wells would extend into and perforate the Santa Margarita Sandstone. The well would be constructed of 3-inch diameter casing to allow the periodic cased-hole conductivity/resistivity (induction) profiling of the aquifer system. This would allow detection of seawater (as measured as an increase in formation conductivity) at any depth from the top of saturation (i.e. the water table) to bottom of the well.

Well Specifics for Each Site:

- One 8 3/4-inch boring to 1,500 feet or Monterey Formation (whichever comes first)
- Geophysical logging (Resistivity, SP and Natural Gamma)
- 3" diameter flush threaded Sch. 80 PVC Casing into Santa Margarita Sandstone

- 100 feet of 0.032-inch horizontally-cut PVC perforations. Continuous or placed in the most productive zones – the zones a production well would be perforated
- Gravel packed in the perforated interval(s)
- Well sealed from the top of Santa Margarita Sandstone
- Well air lifted developed until clean
- Flush-grade surface vault with room for data logging equipment

Data collection from the monitoring well network would include periodic induction logging of the cased borehole and collection of physical water samples from the Santa Margarita Sandstone for calibration purposes. Successive induction logs would be overlaid on previous logs for comparison. If a significant change in conductivity was detected, a depth-specific monitoring well should be drilled at the site to provide improved understanding of the nature of the change. In addition to the indirect measurement of water quality within all portions of the Paso Robles Formation and Santa Margarita Sandstone, the wells would allow monitoring of water level conditions in the Santa Margarita Sandstone.

An example of the type of data that is collected as part of the proposed approach is presented on Figure 1. Figure 1 presents data collected recently from a coastal monitoring well. The data are taken from an induction survey conducted within a three-inch diameter monitoring well similar to the proposed design. This aquifer system has seawater at a depth of 450 feet below ground surface. The presence of seawater is indicated by the rapid increase in conductivity (decrease in resistivity) values below a depth of 450 feet. The presented data represent the baseline value. This well will be surveyed periodically. Data (curves) will be compared to detect the movement of seawater within the aquifer system at this location.

Supplement Network Through Use of Existing Monitoring Wells. In addition to the new wells, and the existing network of monitoring wells owned by MPWMD and California American (see attached map) there are other existing wells in the area of the proposed new wells that can be integrated into the sentinel well network. The proposed well sites are in the coastal bluffs area on the former Fort Ord. As part of the conversion of Fort Ord to civilian use, extensive subsurface exploration has been performed to assess environmental impacts of historical land use. At many locations along the coast, there remain monitoring wells that could be brought into the Watermaster's monitoring program. Many of these wells are quite shallow, but several extend to into the upper aquifer system. These wells would be useful additions to a coastal monitoring network, as many have water quality data extending back to the early 1990's.

In summary, the revised approach will allow collection of the following data:

- Water levels in the Santa Margarita Sandstone
- Collection of water quality samples from the Santa Margarita Sandstone
- Conductivity/Resistivity (Induction) surveys of entire sediment column providing indirect measurement of water quality and water quality changes

Compared to the previous approach the revised approach does not directly collect these data:

- *Base of water bearing sediments – Depth to Monterey Formation.* These data are desirable for increasing understanding of the basin structure. However, these data are very expensive, as drilling to the proposed depths requires a different class of drilling equipment, significantly raising costs. The proposed approach includes drilling into the Santa Margarita Sandstone/Purissima Formation. Within the coastal areas of the Seaside Basin, there are adequate data to project the depth to the Monterey Formation below the bottom of the borehole. In the areas where the Purissima may be encountered, this could be more problematic as there are few, if any, wells that fully penetrate the Purissima into the Monterey.
- *Water Quality sampling of the Paso Robles Formation.* The proposed approach would not allow collection of water quality samples from the Paso Robles Formation. However, the induction surveys will provide water quality data for water within the various units of the Paso Robles Formation.
- *Water levels in two discrete hydrostratigraphic intervals in the Paso Robles Formation.* The proposed approach does not provide water level data from any of the various water bearing units of the Paso Robles Formation. However, some of the sites have existing shallow monitoring wells installed as part of Fort Ord clean-up investigations. Water level data from the shallow system may be available from these wells. Additionally, most of the basin's production and artificial recharge is from the confined Santa Margarita Sandstone, and water levels in this aquifer unit at the coast are the primary management tool.

MONITORING PROGRAM

It is assumed that the new monitoring wells would be folded into the existing Seaside Basin monitoring network. It is understood that the judge has specified collection of water data on a quarterly basis from the coastal monitoring well network. This could be accomplished cost-effectively by quarterly induction profiling of the wells supported by periodic (annual) collection of water quality samples. The quarterly induction surveys could be performed by a geophysical contractor who could provide the data to the Watermaster's designated technical personnel for analysis. This approach would reduce quarterly monitoring cost significantly.

WELL SITES

As part of the work associated with the preparation of this work plan, the team (Joe Oliver of the MPWMD and I) met with a representative of the California State Parks (Ken Gray) to identify locations for the coastal monitoring wells. The team visited and received conceptual approval for five sites in the coastal portion of Fort Ord north of Sand City, and I have identified four primary sites and one alternative location. The tentatively approved sites are shown on the attached map and are as follows:

- Range 8 – This site is at the extreme southwestern corner of Range 8. There is an existing shallow monitoring well at this site although actual depth is unknown. The well site would be with the existing paved road.
- Bunker 11 – This site is located immediately in front of the abandoned Ammo Bunker No. 11. The Ammo bunkers are planned to be maintained for public access and historical interest.
- Bunker 1–This site is located immediately in front of the abandoned Ammo Bunker No. 1.

- MCWD Lift Station – This site is located at the site of Marina Coast Water District’s existing sewer lift station. There is an existing shallow monitoring well as this site. Again, its actual depth is unknown at the time of the preparation of this plan. Data on the construction of the existing well is likely available from BRAC personnel.

The site below was identified as an alternative site due to its distance from the ocean.

- Along Road – This site will be located along the existing north-south trending road. Several turn-out areas were identified that would support a well site and provide sufficient room for construction.

All of sites are located in existing roads and have sufficient previously-disturbed area for well construction staging. Additionally, each site is in an area where State Parks plans to maintain roads and access. This will allow for continued on-going access to the well sites for the purpose of collecting data.

Alternative Sites: If the well sites on State Park Land become infeasible, a fall back position would be to locate the wells within the TAMC right-of-way. These sites are less favorable for coastal monitoring wells because this right-of-way is significantly farther from the ocean than the above sites.

PERMITTING

Permitting of the well sites will likely be the critical path issue in meeting deadlines imposed by the judge. The discussion below assumes the construction on State Parks property. Construction in the TAMC right-of-way has similar permitting requirements.

The coastal bluffs property of former Fort Ord was formally transferred from the U.S. Army to the Dept. of Interior (Nat’l Parks Service) last fall. Ken Gray’s best guess is that the Nat’l Park Service could do a formal transfer to State Parks as early as this March, but based on a field meeting with Mr. Gray on 1/22, the fact that this property has not yet been formally transferred to State Parks does not prevent State Parks from authorizing uses such as monitor wells, because State Parks currently has “operational authority” for the property. Assuming Mr. Gray’s assumption is correct the permitting process would likely include:

- State Parks – Based on discussions with Mr. Gray, the Watermaster could submit a project description and an application for permission to install the monitoring wells. The application would need to include assessment of potential impacts for their review prior to granting the permit.
 - The key issue will likely be construction impacts on:
 - Biological resources, including habitat for special-status wildlife species (Smith’s blue butterfly, snowy plover, and black legless lizard) and presence of special-status plant species (Monterey Spineflower, Wallflower, and Sand Gilia). If the land has been transferred to State Parks, implementation of the Habitat Management Plan would likely mitigate for these impacts, except for state listed plants. If land has not been transferred and remains federal property, there are existing biological opinions that would likely cover impacts to all these species.

- Coastal zone analysis/consistencies (aesthetics, impacts on visitor serving uses and coastal access)
 - Other construction impacts (air quality, noise, etc.) - These can be easily mitigated with standard construction practices.
- CEQA - Assuming that the project can be designed and implemented without significant environmental impacts (i.e., possible biological resources impacts discussed below which require more comprehensive mitigation); a Notice of Exemption could be the appropriate document. This assumes that the project will not involve major controversy or objection.
 - NEPA - The project would not be subject to NEPA if the US Army has conveyed or will convey ownership of the property to State Parks prior to commencement of construction. Ken Gray has indicated that he believes that State Parks has operational control giving them the permitting authority. If Mr. Gray's assumption is wrong regarding permitting authority, it is believed that there is a categorical exemption for monitor wells under NEPA.
 - Coastal Act (California Coastal Commission) - The project would require, at a minimum, an "Amendment to an Existing Coastal Development Permit" which would be considered "Immaterial" (staff level approval). It may be considered "Material" (requiring approval by the Coastal Commission; therefore more coordination and longer time period). If there is no existing permit covering related activities, another process that would be expeditious would be for the project to be considered *de minimus* and receive a waiver from the Coastal Commission staff.

The sites have been selected to avoid impacts to habitat. However, if construction activities are deemed to potentially disturb sensitive habitat, the permits listed below would be necessary. However, the sites likely would be moved to avoid these issues.

- CA Endangered Species Act (ESA) Take permit (California Dept. of Fish and Game) - if the Sand Gilia is located at any sites that may be disturbed and the land has been transferred.
- Federal ESA Take permit (USFWS) - If habitat for snowy plover and/or Smith's blue butterfly is to be disturbed and the land has been transferred.

In addition to the above permits, well construction permits will be required from Monterey County Environmental Health Department. These permits are essentially ministerial and require 2 to 3 weeks to be issued. These permits can only be issued to the drilling contractor.

Timing of permits:

- Timing of State Park Permit: 1 month or less from submission of project definition and supporting documentation
- Well Construction Permits – 2 to 3 weeks.
- CEQA – Assuming a Notice of Exemption: 1 month or less from project definition.
- NEPA – Not Required
- Coastal Commission (if required): minimum 2 months, if Coastal Commission hearing required several months to a year.

- CA / Federal ESA: 6 months to a over a year depending upon resources affected and ownership/designation of land

SCHEDULE

Permitting and site acquisition will control schedule. After permitting is completed, sentinel wells can be installed within 6 weeks. Initial data from the wells would be available within 10 weeks.

COST

Permitting Costs:

Permitting Costs are always difficult to estimate, as the process can be unpredictable. Assuming the permitting process is somewhat similar to that discussed above; permitting costs are estimated at \$ 35,000.

Well Construction/Hydrogeologic Data Collection Costs:

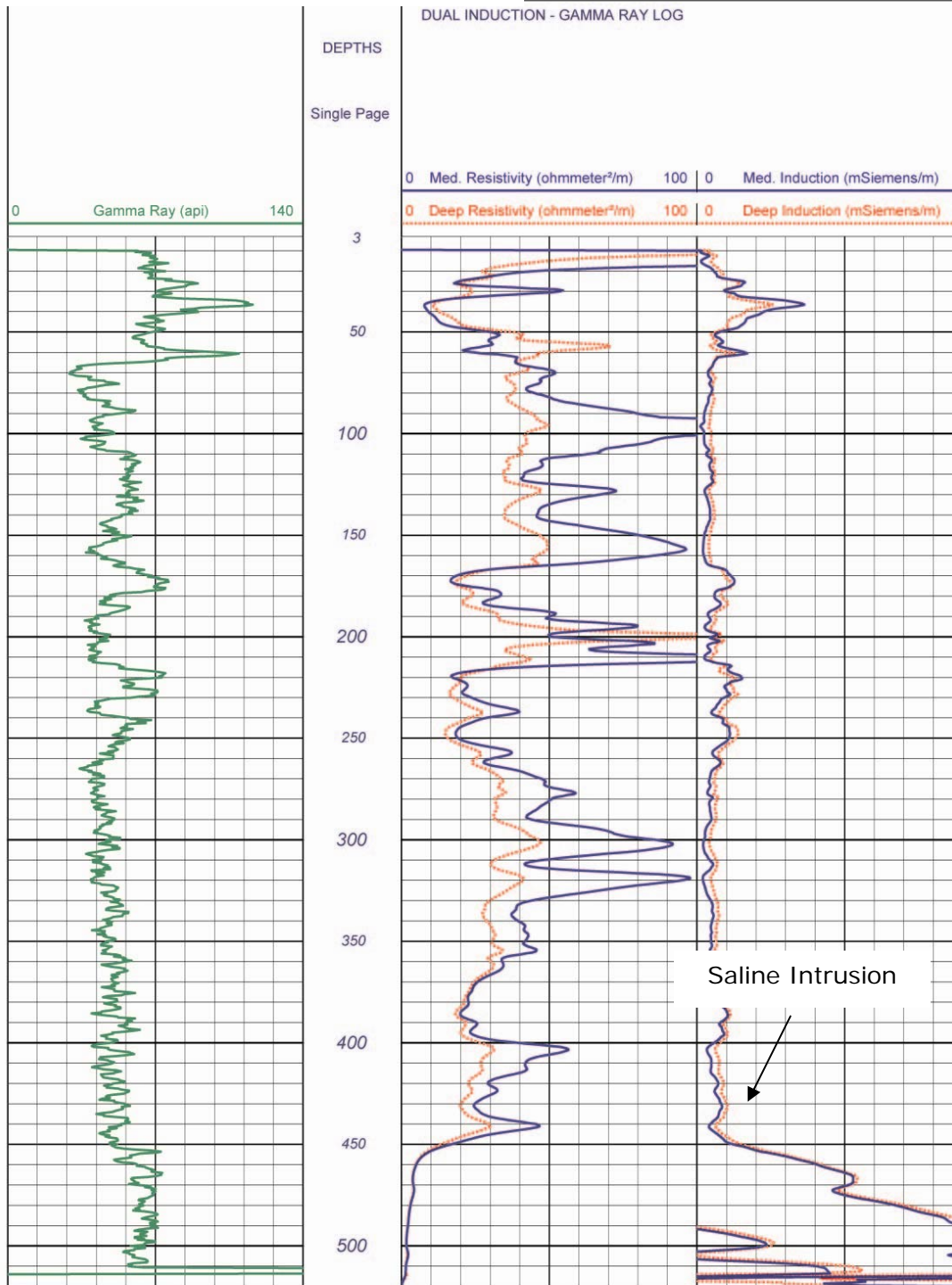
Cost for program management, well construction, hydrogeologic supervision and analysis, monitoring network review and initial data collection are estimated at between \$850,000.

Annual Monitoring Program Costs:

As proposed the 4 coastal sentinel wells would be induction logged quarterly and water quality samples collected annually. This cost of this limited program is estimated \$18,000 per year. This would include approximately \$12,000 for induction logging (\$3,000 per quarter) and annual collection and analysis of water quality samples of approximately \$6,000.

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FIGURE 1 – CASED HOLE INDUCTION LOG



SITE MAP

[Hard Copy to Follow]

SCOPE OF WORK

The following scope of work has been developed to perform the work described in the Seawater Sentinel Monitoring Wells workplan dated January 26, 2007.

Task 1 – Project Management/Meetings – This task includes project management and meetings. It is assumed that 3 meetings in Monterey/Seaside Area will be required during the course of the project. It is assumed that Project Manager and Lead Field Geologist may be required to attend either Watermaster Board or TAC meetings.

Task 2 – Permitting – This task will be lead by Denise Duffy and Associates. Their work will include preparation of permit application to the State Parks, including biologic assessments, and CEQA compliance issues. Their scope of work is attached.

Task 3 – Identify Existing Wells for Incorporation in Monitoring Network – This task will include review of available data regarding existing wells on the former Fort Ord that may be useful for seawater intrusion monitoring. Well construction and data histories will be reviewed to evaluate whether these wells are appropriate for inclusion in the Monitoring Well Network.

Task 4 – Well Construction – This task will include construction of the 4 wells as specified in the work plan. This task will also include coordination of drilling contractor activities, geologic and geophysical logging of each well, and documentation of the activities and data collected. For budgetary purposes, it is assumed that each well can be drilled and developed in 10 work days.

Task 5 – Initial Data Collection -- After completion and development of each well, water quality samples will be collected and an initial “baseline” induction log will be run to measure formation conductivity/resistivity. The induction log can then be used as a point of comparison with subsequent induction logs allowing detection of changes in pore fluid conductivity, an indicator of seawater intrusion. Water quality samples collected be taken to State Certified Laboratory and analyzed for general mineral constituents.

Task 6 – Reporting – After completion of the field program, collected data will be tabulated and summarized in brief report. The report will include “as-built” construction, geologic and geophysical logs, hydrogeologic interpretations and a brief summary of operations.

COSTS

Costs for the proposed project are not complete finalized. Due to the tight schedule with preparing this scope of work some project items are estimated. Additionally, costs assume relatively simple permitting of the selected sites. If the sites change or the permitting becomes more complicated, the costs for permitting could change.

Cost for well construction, monitoring well network review, initial data collection and reporting are estimated at approximately \$850,000.

SCHEDULE

Schedule will be controlled by permitting. Permitting will be initiated immediately after authorization. Best case scenario would be to complete permits in 10 weeks from authorization. If permitting becomes more complicated, the schedule will need to be extended. After

permitting, monitoring wells can be installed within an additional 10 weeks, contingent on drilling contractor availability.

PROJECT PERSONNEL

As of this writing, the provisions for staffing for this project are not finalized. I will serve as project manager and project geologist. Because of the extended construction schedule, contract personnel from a qualified hydrogeologic consulting firm of my choosing will assist me.

The permitting work will be performed by Denise Duffy and Associate, Inc. (DDA). DDA is a Monterey-based planning and permitting firm. They have done extensive work on permitting and CEQA on the former Fort Ord. They long standing personal relationships with the personnel of the various agencies involved in the permitting process.

QUALIFICATIONS

I am a Professional Geologist licensed in the State of California with specialty certifications in engineering geology and hydrogeology. I have 24 years of professional consulting experience in the field of hydrogeology, ground water development, ground water recharge augmentation, and ground water resources management. I have applied this experience to recharge, desalination, water well and basin management projects internationally. During my career I have designed and managed the construction of over 70 municipal wells with depths to 2,500 feet, diameters to 24-inches and discharge rates of up to 6,000 gpm. I have experience with more than 200 monitoring well constructions. I have significant experience in drilling and well construction technology as well as the assessment and rehabilitation of existing wells. I have experience with all types of well rehabilitation techniques including chemical and mechanical treatments, timed-charge methods, liners, and in-situ methods. I have been involved in the successful remediation of well performance problems including sanding and declining production rates due to encrustation or iron bacteria. I have experience in well field operations for purposes of optimizing water quality or water quantity. A summary of well projects and my resume are attached.

CONTRACTING/INSURANCE

It is assumed that the Watermaster will utilize their standard contract for professional services. Please provide a copy as soon as possible for review by my insurance carrier. Alternatively, I would be happy to provide a copy of my standard agreement. Please let me know your preference. I maintain general, automobile, and insurance coverage with limits of \$1,000,000. I maintain professional errors and omissions insurance at \$2,000,000.

I appreciate the opportunity to be involved with this project. Please call if you have any questions.

Sincerely,



Attachment: Denise Duffy Associates Proposal



**Seaside Basin Monitoring Wells
Denise Duffy & Associates'
Proposal for Environmental Review and Permitting Assistance
January 26, 2007**

This constitutes DD&A's scope and budget estimate for conducting California Environmental Quality Act (CEQA) processing and providing permitting assistance for the Seaside Basin Monitoring Wells Project. The project involves installation and operation of up to five monitoring wells within the Fort Ord Dunes State Park area of the Ord Community (former Fort Ord). Total land disturbance would be less than one acre, thereby avoiding the requirement for a California Regional Water Quality Control Board (RWQCB) Construction Storm Water Permit. The sites will be selected to avoid biological resources (including special status species and their habitat) to the extent possible. The improvements would include staging and drilling the groundwater monitoring wells and ongoing data collection to establish water quality in the Seaside Basin Aquifer. Any drilling fluids or soils displaced during well construction will be contained in onsite tankage for legal disposal. For this project, DD&A has been requested to prepare a proposal to provide CEQA Compliance and Permitting Services for these improvements.

SCOPE OF WORK

Task 1: Project Initiation

The DD&A team will attend one kick-off meeting with the project team to finalize the scope of work for the project, identify data needs, confirm deliverables, and establish schedules. It will also be important to develop early on in the process a clear purpose and need statement, comprehensive project description. DD&A will work with the project team to develop these items.

Task 2: Research/Initial Study Checklist/CEQA Determination

DD&A will research background materials, including the Fort Ord Dunes State Park Initial Public Use Access Management Plan, and the Fort Ord Dunes State Park Master Plan, Ord Community Water and Wastewater System Master Plans, City of Seaside General Plan and EIR, relevant Seaside Basin environmental and technical documents, and the CEQA Guidelines, in order to fully understand available background materials for the projects and to satisfy the environmental processing for the projects.

This task also includes a field visit and site review by DD&A which should be conducted with key project team members. The field review will include DD&A Natural Resources Division staff to assess existing environmental conditions and identify any potentially significant impacts to biological resources. Because all work is proposed primarily within already disturbed areas, it is anticipated (and assumed for the purposes of the budget) that no significant biological impacts will be identified or that the project can be redesigned to avoid special status species and their

habitat. *Note: In order to conduct an adequate field review and to complete Task 2, the project team must provide DD&A with a topographic map or an aerial photograph outlining the areas at each lift station that would be disturbed, graded or otherwise impacted by the projects.*

After review of relevant background information and conducting the site review, DD&A will prepare an Initial Study Checklist for the project that complies with CEQA and would provide an e-mail memo to the project team confirming whether the project is exempt from CEQA. For those projects that are considered to be exempt from CEQA and that will not have a significant effect on the environment based on the Initial Study Checklist, a Notice of Exemption (NOE) is the recommended CEQA compliance document. Specifically, the project may qualify for exemption under “Class 6” [CEQA Guidelines section 15306 (Information Collection)]. This section provides an exemption for “basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource. These may be strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded.” The exception to the above analysis is projects for which there is vocal opposition. An NOE as the CEQA compliance document is the most risky process to comply with CEQA. Therefore, if public or agency opposition exists, an NOE may not be adequate due to the risk of lawsuit.

The budget assumes that the project will be determined exempt from CEQA and DD&A will prepare the NOE as described in Task 3. In the event that the improvements do not qualify for an exemption, DD&A is available to prepare an Initial Study/Mitigated Negative Declaration (IS/MND). DD&A can provide a scope of work to prepare an IS/MND for the wells if they do not qualify for a NOE or the lead agency otherwise chooses to prepare an IS/MND. Based on the results of Task 2, DD&A would prepare a budget and scope for the IS/MND.

Task 3: Prepare Draft and Final NOE

Assuming the project qualifies for a CEQA exemption, DD&A will prepare a Draft NOE and attach the IS Checklist per the CEQA Guidelines, which includes a project description and documentation that the project would not create any environmental impacts. California State Parks (State Parks) is assumed to be the lead agency, although if the Water Master or other entity assumes the role of lead agency, the budget and scope are not anticipated to change substantially.

DD&A will submit an electronic copy of the Draft NOE and IS Checklist for review and comment to the project team and State Parks, and will be available to meet to discuss comments and revisions. DD&A assumes that the project team and State Parks will provide one set of written comments each, either in letter form or on a single copy of the document. If additional revisions become necessary, DD&A will perform this out-of-scope work on a time-and-materials basis.

After review of the Draft NOE and IS Checklist by State Parks and the project team, DD&A will revise the documents based on the comments received. After project approval and receipt of the appropriate fee from the project team, DD&A will then submit the appropriate number of copies of the Final NOE and IS Checklist to State Parks and the County Clerk for posting and filing for a 35-day period.

Task 4: Meeting/Hearing Attendance

DD&A has provided budget to attend one (1) meeting on the environmental documentation and related issues. Additional meeting attendance associated with permitting are provided in Task 6 (below). The attendance at additional meetings by DD&A would be billed on a time-and-materials basis.

Task 5: Project Management

DD&A will provide project management services which include client and agency communication, scheduling, contract management, and administration.

Task 6: Permitting

Permitting of the wells will likely be the critical path issue in meeting deadlines imposed by the Seaside Basin adjudication judge. The discussion below assumes the following; if one or more of these conditions do not apply, an amendment to this scope of work and budget would be necessary:

- Construction on State Parks property or other condition eliminating the requirement for National Environmental Policy Act (NEPA) compliance due to federal ownership.¹ If this assumption is wrong regarding permitting authority, it is believed that there is a NEPA Categorical Exclusion (comparable to the Categorical Exemption process under CEQA) for monitoring wells under. Completion of the required paperwork for the Categorical Exclusion is not included in this scope of work because it is assumed to be performed by the lead federal agency (in this case the National Park Service).
- Construction disturbance of less than one acre; precluding CRWQCB Stormwater Permit
- No special status plant or wildlife species will be directly impacted by the project.
- Existing habitat management plans exist to mitigate for minor disturbance to special status wildlife habitat.

The following approvals and/or permits would be anticipated to be required based on the above assumptions:

State Parks Authorization

Based on discussions with Ken Gray, State Parks, the project team could submit project description and an application for permission to install the monitoring wells. The application would need to include assessment of potential impacts for their review prior to granting the permit.

¹ The coastal bluffs property of former Fort Ord was transferred from the U.S. Army to the U.S. Dept. of Interior (National Parks Service) in approximately fall of 2006. State Parks personnel estimate that the National Park Service could do a formal transfer to State Parks as early as this March, but based on a field meeting with Ken Gray on January 22, 2007, State Parks has the operational authority to allow uses such as monitor wells.

The key issues will likely be construction impacts on:

- Biological resources, including habitat for special-status wildlife species (Smith's blue butterfly, snowy plover, and black legless lizard) and presence of special-status plant species (Monterey spineflower, wallflower, and sand gilia). If the land has been transferred to State Parks, implementation of the Fort Ord Habitat Management Plan would likely mitigate for these impacts, except for state listed plants. If land has not been transferred and remains federal property, there are existing biological opinions that would likely provide mitigation for impacts to these species.
- Coastal zone analysis/consistencies (aesthetics, impacts on visitor serving uses and coastal access)
- Other construction impacts (air quality, noise, water quality, etc.)

California Coastal Act Coastal Development Permit (California Coastal Commission)

The project would require, at a minimum, an "Amendment to an Existing Coastal Development Permit" which would potentially be considered "Immaterial" (staff level approval). It may also be considered "Material" by the Coastal Commission staff; and therefore may require approval by the Coastal Commission and the associated longer and more complex process (not anticipated or assumed in the budget estimate). If there is no existing permit covering related activities, another process that would be expeditious would be for the project to be considered "de minimus" and thereby receive a waiver from the Coastal Commission staff. DD&A is prepared to work with the project team to prepare the permit packages for the Coastal Development Permit and to provide coordination with Coastal Commission staff as needed to secure the relevant permits if an "Immaterial Amendment" or a "De Minimus Waiver" is deemed to be appropriate.

State and Federal Endangered Species Act Permits (not included in budget estimate)

The sites have been selected to avoid impacts to sensitive species and their habitat. However, if construction activities are deemed to potentially disturb sensitive habitat and the project is not redesigned to avoid the species and habitat, the permits listed below may be necessary.

- California Endangered Species Act (CESA) Section 2081 Take Permit (California Department of Fish and Game)
- Federal Endangered Species Act Section 7 or 10 (depending upon ownership of property) Take permit (United States Fish and Wildlife Service)

Based on input from the project team, DD&A assumes the above permits will not be required, therefore, is not including this as a task within the budget estimate. If they are found to be necessary, existing HMPs and/or Biological Opinions may be relied upon to mitigate impacts, and DD&A is available to assist with permit applications and processing for an additional fee.

Well Drilling Permits

In addition to the above permits, well construction permits will be required from Monterey County Environmental Health Department. These permits are essentially ministerial and require 2 to 3 weeks to be issued. These permits can only be issued to the drilling contractor. DD&A will not be responsible for assisting with receipt of these permits.

SCHEDULE

DD&A is available to begin work on this project immediately and will commit the necessary staff resources to complete the project. As part of Task 1, a schedule will be developed to meet the needs of the project team. The NOE process typically requires 1.5 to 2 months to complete, including the 35-day posting period, but can be expedited if necessary.

The following are the estimate timeframes for preparing and receiving the relevant permit approvals:

- State Park Authorization: 1 month or less from submission of project definition and supporting documentation (filing of the NOE is expected to be required prior to authorization by State Parks)
- Well Construction Permits: 2 to 3 weeks
- Coastal Commission (if required): minimum 2 months, if Coastal Commission hearing required several months to a year.
- CA / Federal ESA (not anticipated or included in the budget estimate below): 6 months to over a year depending upon resources affected, status of management plans, and ownership/designation of land

BUDGET

The fees required to complete the above-described scope of work tasks are shown in the attached budget. The total fixed fee budget for Tasks 1, 2, 3, 4 and 5 is \$14,600.

Due to the unknown level of effort needed to provide the services outlined in Task 6, this task will be billed in accordance with the time and materials actually expended and the budget for this task is estimated as a not-to-exceed of \$15,000. In addition to the time required to compile application materials (including one round of revisions) and conduct telephone and e-mail correspondence, we anticipate that at least one coordination meetings with each of the responsible permitting agencies will be necessary. This task may require an amendment if the level of effort exceeds that shown in the budget. If the actual work effort cost reaches 90% of this estimate, DD&A will alert the client and request an amendment.

Seaside Basin Monitoring Wells Project

| TASKS # | Task Description | Denise Duffy Principal | Alison Imamura Project Manager | Erin Harwayne Environmental Scientist | Assistant Planner | Graphics | Administration | Task Total |
|---------------------------------|---|---------------------------|-----------------------------------|---|----------------------|----------|----------------|------------|
| | Rate | \$ 185 | \$ 115 | \$ 95 | \$ 75 | \$ 65 | \$ 50 | |
| 1 | Project Initiation/Kick-off Meeting | 4 | 12 | 8 | 6 | | 2 | \$ 3,430 |
| 2 | Research/Initial Study Checklist/CEQA Determination | 2 | 16 | 20 | 32 | 6 | | \$ 6,900 |
| 3 | Prepare Draft and Final NOE* | 2 | 6 | | 12 | 4 | 2 | \$ 2,320 |
| 4 | Meeting/Hearing Attendance | | 6 | | | | | \$ 690 |
| 5 | Project Management | 2 | 4 | | | | 2 | \$ 930 |
| Total Hours | | 10 | 44 | 28 | 50 | 10 | 6 | 148 |
| Total DDA cost by person | | \$ 1,850 | \$ 5,060 | \$ 2,660 | \$ 3,750 | \$ 650 | \$ 300 | \$ 14,270 |

| Estimated Expenses | |
|---|---------------|
| Reproduction (assumes that drafts will be submitted electronically only; hard-copies will be made of the Final NOE/checklist for County Clerk and OPR only) | \$ 200 |
| Postage, phone, fax | \$ 50 |
| Mileage | \$ 80 |
| TOTAL EXPENSES | \$ 330 |

| | |
|---|------------------|
| Total Estimated Cost (without Task 6): | \$ 14,600 |
|---|------------------|

* This budget assumes that special status species or their habitat will NOT be adversely affected by the project construction, and it does not include permitting assistance (Task 6, which is estimated to be \$15,000 for CDP and State Parks) or NEPA compliance documentation.