

APPENDIX B

MEMORANDUM OF UNDERSTANDING

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BETWEEN
AUSTIN WATER UTILITY
AND
WATERSHED PROTECTION AND DEVELOPMENT REVIEW DEPARTMENT
FOR
IMPLEMENTING ENVIRONMENTAL MITIGATION PLANS FOR
WATER TREATMENT PLANT 4**

Background

In 1984 Austin Water Utility (AWU) acquired a 240 acre site on Bull Creek northwest of Austin for a proposed water treatment plant that would treat raw water withdrawn from Lake Travis and for Endangered Species mitigation habitat for the plant. This site became known as Water Treatment Plant 4 (WTP4). Austin Water Utility, formerly known as the Water and Wastewater Department, initiated plant planning numerous times between 1984 and 2002.

In 2002 AWU began planning to develop a 600 million gallon per day water treatment plant on this site. They later reduced the planned capacity to 300 million gallons per day. As part of that work AWU initiated action to hire consultants for preliminary design and engineering in the winter of 2005. During that process, the City's Environmental Board, an advisory board to City Council, raised numerous environmental concerns regarding risks from constructing WTP4 at this site.

One result of their concerns and recommendations was direction from City Council to AWU to develop an Environmental Mitigation Plan. This plan is intended to address any environmental risks associated with building a water treatment plant on the original Bull Creek WTP4 site. From June through October of 2005 a task group comprised of staff members from AWU, Watershed Protection and Development Review Department (WPDRD), Public Works Department, and the Design and Engineering Consultant firm met and developed the "Water Treatment Plant 4 Environmental Goals for Mitigation, Best Management Practices, Monitoring, and Environmental Commissioning" or the Mitigation Plan.

Another result of the Environmental Board's concerns and recommendations was direction from City Council to AWU and WPDRD to develop an MOU between the two departments that will:

- Serve as the policy document implementing the Mitigation Plan.
- Provide institutional memory regarding addressing environmental risks over the life of WTP4's phased development to its full capacity.
- Serve as a strategic plan for addressing WTP4 environmental risks and as a road map for preparation of tactical level plans for implementation of the Mitigation Plan.
- And, serve as the City's formal commitment to address the community's environmental concerns over construction and operation of a water treatment plant on this environmentally sensitive site.

The City's commitment is to build WTP4 in a manner consistent with the Mitigation Plan and to build the plant on-time, on-budget, and to be the most environmentally sound plant possible. Therefore,

Austin Water Utility Agrees:

1. To fully implement the Mitigation Plan

2. To fully staff appropriate divisions and teams, and provide sufficient resources to fully implement this MOU
3. To fully fund/reimburse WPDRD for all monitoring costs as described in Exhibit A, Monitoring Plan, include staffing, durable equipment, contractual costs and supplies.
4. To fully support WPDRD for the implementation of the Environmental Commissioning process including funding the Commissioning Agent/consultant, reimbursement for the WPDRD staff lead support for commissioning and monitoring as proposed in the Mitigation Plan and described in Appendix A, and other reasonable expenses associated with implementation of the Mitigation Plan.
5. To fully fund on-site environmental inspection by WPDRD including staffing and overhead.
6. To authorize a joint team, to be called the Environmental Commissioning team, to make decisions and to act to revise plans, best management practices, and take other actions as needed to assure that WTP4 environmental goals are fully achieved in conjunction with the completion of the plant on time and on budget, as well as during plant operation.
7. To fund/ reimburse WPDRD for expenses related to solicitation and operation of a contract for a Discharge Remediation Contractor as described in Appendix A
8. Provide guidance and training for new managers and staff involved in management succession at all levels of WTP4 and Utility management to assure that the Mitigation plan is fully implemented through all phases of WTP4 development

Watershed Protection and Development Review Department Agrees:

1. To fully implement the Mitigation Plan
2. To serve as the lead department for Implementation of the Mitigation Plan.
3. To provide staffing to act as the interim Environmental Commissioning agent until the consultant can be hired for this purpose.
4. To provide staff at the Environmental Program Coordinator level or higher to serve as the City's Environmental Commissioning lead. This will include one staff support position for the Environmental Commissioning lead with funding/reimbursement from AWU (Appendix A).
5. To be responsible for hiring a consultant firm to serve as the commissioning agent and to solely manage and oversee the activities of that consulting firm.
6. To fully implement the monitoring plan, with reimbursement, as described in the Mitigation Plan and Appendix A.
7. To manage the Discharge Remediation Contractor and provide appropriate staff to supervise any remediation activities.
8. To report all monitoring results to the Environmental Commissioning lead, Environmental Commissioning team, AWU project management, departmental management on a regular basis to be established by the Environmental Commissioning team and to be adjusted as needed based on monitoring findings.
9. Provide guidance and training for new managers and staff involved in management succession at all levels of WTP4 and WPDRD management to assure that the Mitigation plan is fully implemented through all phases of WTP4 development

Austin Water Utility and Watershed Protection and Development Review Department Mutually Agree:

1. That the Bull Creek WTP4 site is an environmentally sensitive site requiring specific actions to ensure construction of WTP4 does not degrade the adjoining environment.
2. That the City's intent is to construct a fully functional water treatment plant on time and on budget.

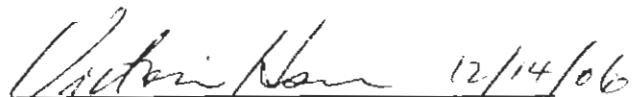
3. That the Mitigation Plan serves as the basis for actions to mitigate the risks to the Bull Creek watershed from construction and operation of WTP4.
4. That Mitigation Plan implementation will be included in all business plans, budgets, staffing plans for both departments until WTP is fully operational at its final capacity.
5. That each department will work diligently to develop accurate cost estimates for implementation of the mitigation Plan, but in all cases actual costs will be the basis for reimbursement.
6. Regular day-to-day communication will be directed primarily between AWU's project manager, the Public Works project manager, WPDRD's Environmental Commissioning lead and the Engineering/Design Consulting Team lead.
7. The Environmental Commissioning Team (EC Team) will be composed of:
 - The director of each department, or his or her designee.
 - The EC Lead
 - One representative from WPDRD's Environmental Resource Management Division
 - WPDRD's Environmental Officer
 - The Public Works project manager
 - One representative from AWU's engineering staff
 - One representative from AWU's BCP staff
 - One representative from the Design/Engineering consultants
 - One representative from the Environmental Commissioning Agent/Consultant
8. Regular and ongoing communications will also occur between departments through the Environmental Commissioning team. This will include establishment of a monitoring reporting schedule as described in item 8 under WPDRD agreed to items.
9. Disputes will be resolved in the most expedient manner at the lowest possible level with the followings levels of participation:
 - I. Through one-on-one proactive participation between the Environmental Commissioning Agent/consultant, the Environmental Commissioning lead, design/engineering consultants, construction consultants and contractors, project managers, and plant operators.
 - II. Through collaboration and consensus between members of the Environmental Commissioning team. If consensus cannot be reached then,
 - III. By the City manager for her/his decision
10. This MOU is effective until the Mitigation Plan is fully implemented through all phases of WTP4 development. Including planning, design, construction, start up, and initial operations. This period is through FY2018 or 5 years after startup, whichever comes first.
11. This MOU is effective for all future treatment capacity increases for WTP4 through final build out.

This MOU may only be terminated with consent of both Directors,

 12/14/06

Perwez Moheet CPA.
Deputy Director
Austin Water Utility

Date

 12/14/06

Victoria Hsu P.E.
Director
Watershed Protection and Development
Review Department

Date

Appendix A

Water Treatment Plant 4
Staffing and Funding Plan

Water Treatment Plant #4: Staffing Needs Summary

Background

The Watershed Protection and Development Review Department (WPDRD) is working with the Austin Water Utility (AWU) to assess and prevent impacts from the construction and operation of Water Treatment Plant #4 (WTP-4). Due to the sensitive environment and the presence of rare and endangered species in the area, the City of Austin has committed to an Environmental Commissioning (EC) for WTP-4. WPDRD will direct the EC process, provide environmental inspection during construction, and perform biological, stormwater, and surface water monitoring. This project was not included in current and future WPDRD staff and budget estimates for FY07 and later years and because of the magnitude of the effort additional staff and funding is needed to prevent existing WPDRD program activities from being severely impacted.

Summary

The estimated WPDRD staff needs for the duration of the WTP-4 project are 3 new FTE's and 2 temporary staff (see Table 1). Of these, 3 FTE's and 1 temporary staff are requested in FY07. The second temporary FTE will be added in FY08. Additionally, AWU will add 0.25 FTE for EC support activities. The proposed funding request is intended to cover unbudgeted salary expenses, administrative, and equipment costs for staff, plus costs for laboratory analyses, contracting, and equipment. The estimated annual cost is \$1,059,157 in FY07, \$400,193 in FY08, and average \$503,270 annually for FY09-FY18.

In addition to the new staff requested, WPDRD will contribute significant existing staff resources that will not be reimbursed by AWU (see Table 2). The estimated existing staff time to be dedicated to this effort is 2.25 FTE's at an estimated annual cost of \$227,754 in FY07 and average \$124,230 annually for FY08-FY18. Additionally, WPDRD will expend approximately \$10,000 for non-reimbursed equipment costs in FY07, but none in subsequent years.

AWU will contribute 0.50 FTE's per year throughout the monitoring process for a total value of \$409,178.

Environmental Commissioning

WPDRD will provide an existing senior staff person to direct the EC process, the "EC staff lead". Other existing WPDRD staff, including senior scientists and engineers will be available as needed to provide technical expertise for the commissioning process. The EC staff lead will:

- Act as the Commissioning agent until the EC consultant can be selected, including:
 - Provide review and feedback on preliminary plant designs.
 - Attending all appropriate meetings.
 - Participating in the EC consultant RFQ process with AWU and Public Works staff.
 - Coordinating all WPDRD staff and activities associated with the EC process.
- After the EC consultant is hired:
 - Be the Single Point of Contact (SPOC) for the EC consultant,
 - Oversee the consultant's day to day activities
 - Make sure issues identified by the consultant are resolved and/or bring them to the attention of WPDRD and AWU staff through the Environmental Commissioning team,
 - Attend meetings as needed.
 - Serve on the Environmental Commissioning team
 - Be the SPOC for AWU staff and any others needing to communicate or work with WPDRD on commissioning, monitoring or other inter-departmental issues.

In order to provide this level of service by existing staff, WPDRD requests that AWU provide funding for a full-time Project Coordinator to provide support to the EC staff lead. The estimated cost for this position is expected to be \$65,833. In addition, \$10,000 per year is requested to provide for administrative, equipment, education, printing and travel costs for the EC Lead and the newly funded position.

The total annual funding requested for the EC lead is for FY07 is \$75,833.00.

AWU has added two FTE's to the Wildland Conservation Division's FY07 and subsequent budgets for WTP4 Support. Additional EC support will be funded through these positions.

Because of the immediate need for the EC lead's work, WPDRD will fill this position immediately with a full-time, temporary staff person until the permanent position can be approved, advertised, and hired in 3-6 months.

Monitoring

Extensive stormwater, groundwater, surface water, and biological monitoring will be performed by WPDRD staff to provide baseline and impact assessment data prior to, during, and after construction of the water treatment plant. The details of the monitoring plans are included in the September 2005 Environmental Goals and Recommendations for Mitigation, Best Management Practices, Monitoring, and Environmental Commissioning. The staff time and cost estimates to implement this monitoring program are summarized in Table 1.

Groundwater and Surface Water Monitoring

Surface water monitoring for water quality and ecological assessment will require additional staffing to prevent significant impacts to ongoing program efforts. WPDRD requests one additional full-time, permanent Environmental Scientist Associate. Annual costs for this position are anticipated to be \$52,843.

Monitoring costs for equipment and laboratory analyses are anticipated to be \$44,990 for FY07 and \$18,180/yr thereafter.

Stormwater Monitoring

Stormwater monitoring will be accomplished with existing staff. Unbudgeted costs for equipment and analytical testing are anticipated to be \$101,300 for FY07 (including installation of a maximum of 4 stations) and \$29,300/yr thereafter.

Salamander Monitoring

Monitoring for the Jollyville Plateau Salamander is a significant effort. Work will include salamander marking and recapture, genetics, and regular surface counts. For this level of effort WPDRD is requesting one full-time, permanent Environmental Scientist Associate and two full-time, temporary Environmental Scientist Associates. One temporary staff person will be hired in FY07 and a second in FY08. The total anticipated staff costs are anticipated to be \$51,746/yr for the FTE and \$77,376/yr for the temporary positions. The first year of the project will also include contract costs for mark recapture oversight and genetics work which will total \$185,210. Subsequent annual non-salary costs would be \$12,500/yr.

Golden-Cheeked Warbler Monitoring

Enhanced golden-cheeked warbler monitoring will be accomplished using AWU BCP staff.

Environmental Inspection

To provide enhanced environmental inspection during construction and provide a higher level of construction inspection in the Bull Creek watershed as a means of mitigating for the impact of the construction of WTP-4, WPDRD requests funding for 1 full-time Environmental Inspection Specialist Senior to be dedicated to the WTP-4 project and the Bull Creek watershed. The estimated annual salary for that position is estimated to be \$65,833.

Inspector positions require a dedicated vehicle, tablet computer and desktop PC. That first-year equipment cost is estimated to be \$39,602. An additional \$5,500 per year is requested to cover administrative, training, vehicle fuel and maintenance, and personal equipment costs.

Construction Discharge Remediation Contractor

To remediate sediment, raw or treated water, or other pollutants discharged to streams from area construction projects, \$50,000 is requested in the first year to fund an on-call contractor. This contractor would be used on an as needed basis to remediate polluting discharges from construction in the Bull Creek watershed if a responsible party could not be identified. This contract will be managed by WPDRD and the fund would be replenished annually by AWU as needed. For estimation purposes, \$10,000 is used as the estimated annual replenishment cost.

BMP Study

As described in the mitigation document, a study is proposed to identify opportunities for stormwater, water quality, and recharge enhancement BMP's in the Bull Creek watershed. This study would be done by a consultant and managed by WPDRD. The goal would be for the contract to be let in FY07 and the study performed in FY08. The estimated cost is \$350,000.

Table 1
WPDRD and AWU Staffing and Funding Request

		FY07				FY08				FY09-FY18					FY07-FY18	
Task	Job Title	FY07 FTE's (temp or perm)	FY 07 Salary/Ben.	FY07 Non-Salary Costs	Total FY07	FY08 FTE's	Total Salary/Ben.*	Total Non-salary Costs	Total FY08	FY08-FY18 FTE's	Total Salary/Ben.*	Total Non-salary Costs	Total Costs	Avg. Annual Costs	Avg. Annual Costs (All Yrs)	Total Project Costs (All Yrs)
EC Lead Staff	Env. Prog. Coord.	0	\$0	\$5,000	\$5,000	0		\$5,000	\$5,000	0		\$50,000	\$50,000	\$5,000	\$5,000	\$60,000
EC Support Staff	Proj. Coord.	1	\$65,833	\$5,000	\$70,833	1	\$68,137	\$5,000	\$73,137	1	\$764,580	\$50,000	\$814,580	\$81,458	\$79,879	\$958,549
EC Support Staff (AWU)	Cons. Prog. Coord.	0.25	\$11,638	\$2,500	\$14,138	0.25	\$12,045	\$2,500	\$14,545	0.25	\$146,254	\$25,000	\$171,254	\$17,125	\$16,661	\$199,937
Env. Insp. Staff	Env. insp. Sr.	1	\$65,833	\$39,602	\$105,435	1	\$68,137	\$5,500	\$73,637	1	\$827,320	\$55,000	\$882,320	\$88,232	\$88,449	\$1,061,391
Monitoring Staff																
GW/SW Water	Env. Sc. Assoc. (perm.)	1	\$52,843	\$0	\$52,843	1	\$54,692		\$54,692	1	\$664,076		\$664,076	\$66,408	\$64,301	\$771,611
Salamander	Env. Sc. Assoc. (perm.)	1	\$52,843	\$0	\$52,843	1	\$54,692		\$54,692	1	\$664,076		\$664,076	\$66,408	\$64,301	\$771,611
Salamander	Env. Sc. Assoc. (temp.)	1	\$38,688	\$0	\$38,688	2	\$77,376		\$77,376	2	\$773,760		\$773,760	\$77,376	\$74,152	\$889,824
Monitoring Contractor/Equip./Analys.																
GW/SW Water				\$44,990	\$44,990			\$18,180	\$18,180			\$181,800	\$181,800	\$18,180	\$20,414	\$244,970
Stormwater				\$101,300	\$101,300			\$29,300	\$29,300			\$293,000	\$293,000	\$29,300	\$35,300	\$423,600
Salamander				\$185,210	\$185,210			\$12,500	\$12,500			\$125,000	\$125,000	\$12,500	\$26,893	\$322,710
Const. Discharge Remediation Contractor				\$50,000	\$50,000			\$10,000	\$10,000			\$100,000	\$100,000	\$10,000	\$13,333	\$160,000
BMP Study				\$350,000	\$350,000				0				0	0	\$29,167	\$350,000
Total		5.25	\$287,678	\$783,602	\$1,071,280	6.25	\$335,079	\$87,980	\$423,059	6.25	\$3,840,066	\$879,800	\$4,719,866	\$471,987	\$517,850	\$6,214,203

Note: Estimated salaries are conditional on negotiated amounts based on qualifications of applicants, but will be hired within the proposed classifications.

*For permanent staff salaries are estimated to increase by 3.5% each year beginning in FY08.

Table 2

WPDRD and AWU Non-Reimbursed Contribution (from existing resources)										
Task	FY07 FTE's (temp or perm)	FY07 Salary/Ben.	FY07 Non- Salary Costs	Total FY07	FY08- FY18 FTE's (temp or perm)	FY08-FY18 Total Salary/Ben.*	FY08- FY18 Total Non- salary Costs	FY08- FY18 Total Costs	FY08-FY18 Avg. Annual Costs	FY07- FY18 Total Costs
EC Lead Staff	0.35	\$33,060	\$0	\$33,060	0.35	\$449,681	\$0	\$449,681	\$40,880	\$482,741
EC Staff Support (AWU)	0.25	\$27,867	\$0	\$27,867	0.25	\$379,045	0	\$379,045	\$34,459	\$406,912
Monitoring Staff (WPDRD)	1.9	\$194,694	\$10,000	\$204,694	1	\$916,853	\$0	\$916,853	\$83,350	\$1,121,547
Monitoring Staff (AWU)	0.25	\$9,331		\$9,331	0.25			\$126,920	\$11,538	\$136,251
Total	2.75	\$264,952	\$10,000	\$274,952	1.6	\$1,745,579	\$0	\$1,872,499	\$170,227	\$2,147,451