



GA0035 09

OREGON WATER RESOURCE DEPARTMENT
WATER CONSERVATION, REUSE AND STORAGE
GRANT PROGRAM

RECEIVED
SEP 02 2008

WATER RESOURCES DEPT
SALEM, OREGON

Project Name: Drift Creek Storage Project

Type of Grant Requested: Water Conservation Reuse Above Ground Storage
 Storage Other Than Above-Ground [Including Aquifer Storage and Recovery (ASR)]

Program Funding Dollars Requested: \$ \$500,000 Total cost of planning study: \$ \$1,007,010

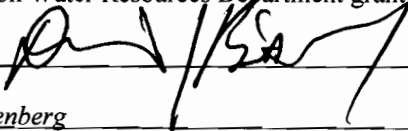
Note: Request may not exceed \$500,000

Applicant Name: <i>Dave Bielenberg, Chair</i>	Co- Applicant Name:
Organization: <i>East Valley Water District</i>	Organization:
Address <i>P. O. Box 1046</i>	Address:
<i>Mt. Angel, Oregon 97362</i>	
Phone <i>503-763-1833</i>	Phone:
Fax: <i>503-763-1834</i>	Fax:
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Fiscal Officer Name: <i>Kristina McNitt</i>	Principle Contact:
Organization: <i>East Valley Water District</i>	Organization:
Address: <i>P.O. Box 1046</i>	Address:
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Email: <i>kristina@klmconsulting.biz</i>	Email:

Certification:

I certify that this application is a true and accurate representation of the proposed work for a project planning study and that I am authorized to sign as the Applicant or Co-Applicant. By the following signature, the Applicant certifies that they are aware of the requirements of an Oregon Water Resources Department grant and are prepared to implement the project if awarded.

Applicant Signature:  Date: Sept. 1, 2008
Print Name: Dave Bielenberg Title: Board Chairman

Please give a brief summary of the planning study using no more than 150 words.

- 1) *determine wetland mitigation plan*
- 2) *analyze water delivery methods (pipeline, pump, etc.)*
- 3) *determine fish passage mitigation requirements*
- 4) *complete comprehensive water quality analysis*
- 5) *finalize cultural historical analysis*

- 9) *perform additional fish habitat surveys to determine quality and quantity of stream habitat that may be lost due to flooding*
- 10) *perform geotechnical investigation for stability, need for borrow materials, type of dam construction*
- 11) *define critical path analysis for remaining tasks*
- 12) *identify local permitting procedures - land use, road and utility access, railway crossing*
- 13) *provide engineering analysis of construction costs*

IV. Grant Specifics

Section A. Common Criteria

Instructions: Answer all questions in this section by typing the answer below the question. It is anticipated that completed applications will result in additional pages.

1. Describe how the planning study will be performed. Include:
 - a. A description of the planning schedule/timeline, which includes identifying all key tasks. (Section VI provides an opportunity for a “graphical” representation of the schedule.)

See Section VI for planning timeline. The studies will be completed in two years or less, as detailed. See (6) of this section (IV) regarding detail on needed planning studies.

- b. When the planning study could begin.

Immediately

2. Provide a description of the relevant professional qualifications and/or experience of the person(s) that will play key roles in performing the planning study. If the personnel have not been decided upon, include a description of the professional qualifications and/or experience of the person(s) you anticipate will play key roles in performing the planning study.

Professional Qualifications of Engineer/Project Manager with multi-discipline engineering firm or support technicians, to be selected:

Professional civil engineer with demonstrated experience in project design and management, hydrologic analysis, agriculture engineering, and irrigation water supply

Associated Consultants:

Fishery biologist to assist with determining fish passage, habitat and survey needs;

Water quality specialist to assist in defining necessary beneficial use parameters and permitting;

Additional cultural review, geotechnology and specific disciplines as required to support the project management.

Current consultants include:

Murray, Smith and Associates, Inc. - Engineers and Planners

David Leibbrandt, P.E.

Ellis Ecological Services, Inc.

Robert H. Ellis, Ph.D., Fisheries and Aquatic Studies, Biological Assessments

Stuntzner Engineering and Forestry, LLC

W. Richard Verboort - Professional Engineer, Civil Engineer, CWRE

Eric Urstadt, Professional Engineer, Professional Land Surveyor

Bolyvong Tanovan, Hydraulic Engineer, Ph.D./PE

Adam Sussman, Groundwater Solutions, Inc.

Other consultants have provided study information to the district in the past, including those listed below.

East Valley Water District has performed a number of studies, primarily over the last three years, and has provided those to the department for earlier analysis. The document volumes can be provided to the department for review upon request. (See list following.)

- 1) Stuntzner Engineering LLC: March 23, 2007
Report regarding estimated storage and pool area, dam height and elevation alternatives*
- 2) Murray, Smith & Associates, Inc.: February 23 2007
Overall project planning assessment
Preliminary system layout planning and hydraulic analysis of potential district water supply distribution system to determine potential pipe sizing and layout, pump needs conveyance system outlining alternatives for water conveyance/distribution system*
- 3) Bolyvong Tanovan: February 2007
Runoff yield analysis estimating the run-off volume that can be expected for the project site*
- 4) Robert W. Keeler PhD.: December 11, 2006
Cultural resources review of the project identifying no archaeological site of significance within the floodplain of the project area and recommending that an adjacent site to the project boundary be identified for protection during construction*
- 5) Northwest Environmental and Energy Professionals: October 2006
Feasibility of obtaining environmental permits and recommendation for in-depth review for permit completion in specific disciplines*
- 6) Ellis Ecological Services, Inc.: October 2006
Fish sampling report indicating no listed steelhead were found but there are no barriers below the site preventing migration of fish to the site; recommendation for additional survey work*

- 7) *3Di West and by Stuntzner Engineering: September 27, 2006*
Topographic maps of reservoir area detailing project site
- 8) *Vigil-Agrimis, Inc.: August 10, 2006*
Report providing results of preliminary water quality study based on 303(d) listing for water quality limitations for summer temperatures and identifying reservoir operation mitigation
- 9) *Existing state and federal records: Lake data survey for reservoirs in the Northwest*
- 10) *Northwest Wildlife Consultants, Inc.: June 30, 2006*
Bird summary by general habitat area identifying bird life found in the project area
- 11) *Murray, Smith & Associates, Inc.: November 14, 2005*
Proposal describing potential feasibility discipline analyses required
- 12) *Northwest Environmental and Energy Professional: November 12, 2005*
Proposal describing environmental work necessary to obtain permits
- 13) *Stuntzner Engineering LLC: July 2, 2005*
Report on an initial review of the feasibility of the Drift Creek project identifying preliminary general hydrology, geology and soils information and augmenting data inventory with test pits constructed; advising no identified fatal flaws to proceed with project
- 14) *Tucson Myers and Associates, Engineers: February 1994*
Reconnaissance level investigation of a water resources project and development program, identifying alternate reservoir sites and other supply alternatives and cost comparisons

The work under the next planning phase will continue project development studies to prepare for project development, additional economic analysis and finalization of the delivery system plan.

3. What local, state or federal project permitting requirements/issues do you anticipate in order for the planning study to be conducted?

During the planning study, data to complete the following permits for the project will be assessed as detailed below. No additional permits are required to conduct the studies. The district has had the cooperation of landowners in providing access as necessary to study areas.

1) The federal Clean Water Act requires a permit from the Oregon Department of Environmental Quality (DEQ), with review and approval by the state that conforms to the U.S. Environmental Protection Agency (EPA) needs to develop water quality standards to prevent pollution of surface waters. Oregon water quality standards require temperature parameters to protect beneficial uses in state waters. Drift Creek is identified on DEQ's 303(d) list for exceeding temperature criteria for salmon and trout rearing and migration, but is not listed for any other parameter than temperature. A 401 water quality permit will be required as well from DEQ and a 1200-C erosion control permit may be required from the agency.

2) A water right application will be provided to the Oregon Water Resources Department (WRD) for storage. An additional water right for use of the stored water for agriculture purposes will be required to supplement current water rights used by the irrigators of the district. The storage permit will require substantial documentation of flows, including analyses of runoff yields, bypass and ecological flows, optimum peaks, existing rights, instream rights under administrative protection, flow exceedance parameters, geotechnical analysis, and dam safety. Within that process, other natural resource agencies will provide feedback relative to fish and wildlife protection and other issues determined in agency reviews that are part of the WRD process.

3) A waiver for fish passage will be required from the Oregon Fish and Wildlife (ODFW) Commission. If the waiver is not approved, appropriate passage requirements will apply.

4) Appropriate land use permits will be required from Marion County once the final location and boundaries for the project are determined. Additional permits may be required for any crossings of roads, railway or existing utilities, grading and construction. While the reservoir is sited in Marion County, some of the farms served are in Clackamas County. If pipeline delivery placement or other changes require any permits from Clackamas County, those will also have to be obtained.

5) Access to the site has been provided by landowners during previous studies and the district anticipates that access will continue to be agreeable to any involved landowners.

6) A fill and removal permit will be required from the Oregon Division of State Lands in correlation with the U.S Army Corps of Engineers.

7) Final approval from the Oregon State Historical Preservation Office (SHPO) will be required once all cultural resource analysis is complete.

8) Final mapping of wetland delineation will be required to meet the requirements of the Division of State Lands Department and define mitigation.

9) Review by NOAA Fisheries Service and ODFW will be required regarding migration, species inventory and count, habitat survey, and passage requirements. It is anticipated that a biological assessment (BA) will be required for threatened Upper Willamette River Steelhead.

10) FEMA (Federal Emergency Management Act) requires a permit to include a flood control plan, dam safety features, water release scheduling, controls to diminish chance of overtopping or breaching, and review of any potential geo-hazards.

4. Are permits/governmental approvals required for the planning study? If yes, indicate whether you have obtained the necessary permits/governmental approval. If you have not obtained the necessary permits/governmental approval, describe the steps you have taken to obtain them.

See above.

5. Describe your goal (which must be based on evaluating the feasibility of developing a water conservation, reuse or storage project) and how this study helps to achieve the goal.

The East Valley Water District requires a source of stable water supply for 15,000 acres of agricultural development. Conditional "time-limited" permits and temporary transfers now in place are not long-term and some of the time-limited permits have been canceled this year. The goal of the project is to provide the needed long, term stable water supply for the district farms. The stored water will relieve pressure in the three limited groundwater areas in the district's service area. The project will also relieve over appropriated surface water sources. The studies conducted under the grant will finalize costs and conditions for developing the reservoir.

6. Describe the technical aspects of the planning study and why your approaches are appropriate for accomplishing the goal of the planning study.

The district has completed prior studies to investigate the technical feasibility of the proposed Drift Creek Dam from a general civil and geotechnical engineering perspective and from the environmental perspective. While environmental and economic factors will need to be addressed further, there are no apparent "fatal flaws" that would make the project non-constructible. The following study issues need to be addressed to finalize the feasibility to take the project to the next level of assurance.

1) Preliminary wetland delineation and mapping of the entire reservoir footprint was conducted between March and September 2006. Preliminary estimates of wetland acreage total approximately 21.8 acres, including 12.6 acres of emergent wetlands and 9.2 acres of stream habitat. The wetland acreage is expected to be manageable in terms of mitigation potential. Final wetland mapping will result once the studies provide the aerial photography component to verify actual acreage.

2) Determination of the water delivery method will identify how the Section 401 Water Quality Certification will need to be addressed with the Oregon Department of Environmental Quality (DEQ) to develop a preliminary temperature plan for the reservoir.

3) *Analysis of the water delivery method will also provide support for continuing land use requirements with both Marion and Clackamas Counties. Defining the water delivery method will then require land use zoning discussions with both counties if a pipeline delivery is selected.*

4) *Additional investigation of mitigation for a fish passage waiver will be conducted with staff of the Oregon Department of Fish and Wildlife and federal fishery agencies, as required. Preliminary discussions with ODFW resulted in the identification of two potential mitigation sites in the basin: Silverton Water Supply Dam and Scotts Mills Dam on Butte Creek, both needing redesign to prevent blockage of fish passage. The only barrier on Drift Creek is a 6' falls located just upstream of where the West Fork of Drift Creek crosses Drift Creek Road. If ODFW confirms that the falls are a barrier to migration, then approximately six miles of stream may require mitigation for a fish passage waiver from ODFW. Whether mitigation is required and how it may be accomplished will result from the next step of studies.*

5) *A comprehensive water quality review needs to be prepared with bathymetric data and most recent temperature data to further determine water quality impacts. A preliminary review utilized previous temperature data collected by DEQ downstream from the project footprint. Stations were installed with continuous recording thermometers within and downstream of the proposed reservoir to evaluate seasonal changes in stream temperatures in Drift Creek and the Pudding River. These temperature readings will be utilized to help refine thermal modeling predictions of the proposed impoundment.*

6) *Additional work needs to be conducted on a slope adjacent to the proposed reservoir that may have archaeological significance upslope of the waterline. This work would demonstrate that the site is outside the footprint of the proposed project and could be targeted for protection during the construction phase of the project. A draft technical memo on cultural resources has been prepared that indicates no significant cultural or historical resources were identified within the reservoir footprint that could pose an obstacle to environmental permitting.*

7) *EVWD has had the site flown and has detailed topography available for the reservoir and dam site. Contour intervals are 2 feet for the reservoir and 1 foot for the area around the proposed dam. Further bathymetric analysis combined with the topography should result in a clearly defined relationship among depth, area and volume.*

8) *Further instream flow analysis and water right evaluation needs to occur to determine the rate and quantity of water that would need to be discharged from the reservoir to meet requirements for instream benefits.*

9) *Aerial photography and contour maps of the proposed dam and reservoir site need to be reviewed to gain a better estimate of the total acreage of the proposed reservoir as well as to complete wetland delineation.*

10) *Additional fish habitat surveys must be conducted to determine the quality and quantity of stream habitat that could be lost due to flooding by the reservoir. Additional fish sampling needs to be accomplished for the presence of listed and native, migratory fish species in Drift Creek and its tributaries. Preliminary sampling as the result of walking surveys identify no federally listed fish species currently in place, but the stream may have habitat for such fishery. No barriers below the site were identified that would prevent migration of fish to the site.*

11) *Additional soil information is required to complete the design of the reservoir. Earlier foundation area test pits indicate rock in the area of the left and right abutments supportive of reservoir development. While the presence of rock is a good sign for a roller compacted concrete dam as the rock is a good material to tie into, it cannot yet be determined that this type of construction is the best for this site without further soil investigations. Other testing indicates that seepage in the reservoir area should not be a major factor if the soils of the entire reservoir bottom are similar to the test pit soils. Soil testing for permeability is required for confirmation. Upper fine grained soils from the test pits appear to provide adequate volume of material for the proposed dam. An earthen dam could be designed to work in this site as an alternative.*

12) *The district is in the process of defining its critical path analysis for the remaining phases of the project.*

13) *The feasibility process for determining the most suitable water delivery system is still ongoing and must be completed. In the next stage of studies, a technically feasible approach for construction and operation of the reservoir and water delivery system will be defined.*

7. Describe the level of involvement, interest and/or commitment of different entities associated with the planning study (attach letters of support). Describe how these entities will benefit or be impacted by the planning study.

The district has been working with Marion County to assure compliance with the county's comprehensive plan and ordinances. The county has been supportive of a solution that will both enhance agricultural operations and crop yields in these EFU zones while providing additional economic benefit to the county.

Because farms in both Clackamas and Marion Counties (within the district's boundaries) will benefit from the project, the Marion County Soil and Water Conservation District and the Clackamas County Soil and Water Conservation District provide support of the project as it will enhance the district's water supply and crop yields and the pipeline delivery system will conserve water delivered to the farm.

The support of food processing companies acknowledges the need of a sufficient reliable water supply to fulfill contracts between farmers and the food processors.

Other entities, per copies attached, have also provided their support.

Above-Ground Storage

Please answer the following three questions **BEFORE** proceeding:

Will the project divert greater than 500 acre-feet of surface water annually? Yes No

Will the project impound surface water on a perennial stream? Yes No

Will the project divert water from a stream that supports sensitive, threatened or endangered species? Yes No

If you answered "Yes" to any one of these questions, by signature on this application, you are committing to include the following elements in your planning study:

- **Analyses of by-pass, optimum peak, flushing and other ecological flows of the affected stream and the impact of the storage project on those flows;**
- **Comparative analyses of alternative means of supplying water, including but not limited to the costs and benefits of water conservation and efficiency alternatives and the extent to which long-term water supply needs may be met using those alternatives;**
- **Analyses of environmental harm or impacts from the proposed storage project;**
- **Evaluation of the need for and feasibility of using stored water to augment in-stream flows to conserve, maintain and enhance aquatic life, fish life and any other ecological values; and**
- **For a proposed storage project that is for municipal use, analysis of local and regional water demand and the proposed storage project's relationship to existing and planned water supply projects.**

Proceed in answering the following questions:

1. Describe when and to what extent the project associated with the planning study includes provisions for using stored water to augment instream flows to conserve, maintain and enhance aquatic life, fish life or other ecological values.

Based on preliminary water quality modeling conducted by Vigil-Agrimis, Inc., the reservoir may discharge cooler water from the depths of the reservoir that may result in a temperature decrease in the Pudding River immediately downstream of the confluence with Drift Creek, by 2 degrees Centigrade or more.

Additional discussion with the fishery agencies will determine how the storage and releases affect the fishery and what operational regime may be required to protect species while stabilizing the water supply.

2. Describe the water supply need(s) that the project associated with the planning study in intended to meet. Applicant should reference supporting documentation that would be available upon request.

The farms served by the East Valley Water District are generally in Groundwater Limited Areas east of Mt. Angel to the area of Scotts Mills. Surface water sources in the area are already overappropriated. The Water Resources Department (WRD) has established the Mt. Angel and Glad Tidings Groundwater Limited Areas (GLA) within the district and surrounding

lands. Expanded groundwater use for all but domestic uses is now prohibited. The GLAs were ordered in the mid-1990s by WRD.

While some existing groundwater rights serve the district's farms, the supply has been inadequate to meet needs as groundwater levels have lowered. In 1989 district users filed a number of water right permits in the area, but no action was taken on the permits for several years. After 1990 the WRD did not accept new permit applications. In 1993 the WRD provided "time-limited permits" for a five year period. During that time it was anticipated that the district users might be able to find alternative sources of supply or that department review of the aquifer might indicate water availability. The district attempted to find alternative supplies (see #4 below). Many of these time-limited permits were renewed through 2007, but in 2008 the WRD issued a letter canceling a number of the time-limited permits. Subsequent to that cancelation, the water supply has been accommodated through a series of temporary transfers. However, the supply is still inadequate to meet current needs. The storage reservoir would alleviate that situation.

3. Explain how the project associated with the planning study will meet the water supply need(s), and indicate what percentage of that need will be met. (For example: If your water supply need is 20,000 acre-feet of additional water and the project will supply 10,000 additional acre-feet, 50% of your need will be met).

The reservoir is expected to deliver approximately 12,000 acre feet of water supply on average. That supply will provide enough supplemental water to allow farmers to irrigate their current lands with a full supply of water when reservoir storage is available (100%). Currently lands in the district are unable to be fully irrigated on a permanent basis as a significant portion of the acres are irrigated under time-limited conditional permits or temporary transfers since full supply is not available.

4. Present convincing argument that there are no other reasonably achievable alternatives that would be able to meet the water supply need(s). Applicant may reference supporting documentation that would be available upon request.

Since 1994, the district has been working to identify and study alternative supply solutions. Alternatives included purchase and importation of water from Detroit Reservoir, groundwater recharge, the use of reclaimed water and water storage facilities.

The district addressed the purchase of water stored in the federal Detroit Reservoir. The necessary facilities to transport the water to the district area were deemed to be much more expensive than other alternatives. Then later in the 1990s the Bureau of Reclamation, which holds the storage water right for Detroit Reservoir, put a hold on contracts for water from the facility due to a potential threatened species. That project would have required a pumping plant near Stayton and a 66" diameter pipe along the highway for about 5 miles. The pipeline would then discharge into the Pudding River and then require a piped mainline up to the distribution system required to serve the farms. The annual cost in 1994 dollars was \$48,410 a year for water purchase and \$540,000 for the cost of energy for pumping. In today's dollars, that cost is likely double. In addition, there was concern from the fishery agencies that introducing water from one river system into another would be harmful to the habitat of the fishery. The district's 1994 study "Reconnaissance Level Investigation of a Water Resources A Project and Development Program" authored by Tucson Myers & Associates lays out the

alternatives' analysis in detail. This is a fairly voluminous document provided to the department last year, along with other study documents.

Groundwater recharge was deemed infeasible because additional surface water would be required and was not available due to closure within the GLAs. Water treatment would be required before injection, according to DEQ, to meet state mandated non-degradation standards. The cost of treatment facilities was deemed excessively high. Because of the size of the district, a series of wells would be required and each would have to be connected to a surface water source or reservoir, requiring a network of pipes or canals not in existence. The capacity of the basalt aquifer to receive and transport injected water to points of use throughout the district was unknown as insufficient hydrogeological data existed to address many unanswered questions.

The City of Salem considered piping reclaimed water that would otherwise be diluted and placed in the river, delivering it instead to farms in the district.. However, the food processing companies who purchase edible crops from farmers indicated they would decline to purchase crop yields if reclaimed water was used. In addition, the city found that it was not feasible to put in the pipeline system that would transport the water to the district for use on agricultural lands.

The 1994 study and other subsequent studies commissioned by the district addressed several potential reservoir sites for storage of surface water outside the irrigation season. Over 75 reservoir sites were addressed, many sites identified in studies produced by both the WRD and the Natural Resources Conservation Service (NRCS). In addressing all of the sites identified that would meet feasible criteria, only four were studied further as the others didn't meet threshold criteria. The Drift Creek project is the alternative now being pursued by the district as it meets all of the criteria and has been shown to be without fatal flaws and appears to be economically viable as a water supply alternative.

5. Provide data and information on the associated project and the project's sources of water supply:
 - a. The location of the associated project. (Include the basin, county, township, range and section.)

The Drift Creek Project encompasses approximately 240 acres in Marion County, Oregon, approximately 12 miles south-southeast of Silverton, Oregon. The reservoir would be located in parts of the following sections: 1) Township 7 South, Range 1 West, Willamette Meridian, Sections 23, 26 and 36; Township 8 South, Range 1 West, Willamette Meridian, Section 1; Township 8 South, Range 1 East Willamette Meridian, Section 6.

- b. The name(s) and river mile(s) of the source water and what they are tributary to, if applicable.

The Drift Creek subbasin (6th field HUC) comprises an area of approximately 15.6 square miles (3.3% of total basin area) in the upper portion of the Pudding River watershed. The site controls this drainage area and could store runoff October through April annually. Drift Creek is a small portion of the Pudding River watershed (5th field HUC), comprising approximately 531 square miles of land in Marion and Clackamas Counties. Eight major sub-basins drain into the

Pudding River: Silver Creek, Zollner Creek, Abiqua Creek, Butte Creek, Drift Creek, Little Pudding River, Rock Creek and the Senecal/Mill Creek drainage area. Elevations within the watershed range from 4,280' at the summit to 66' at the confluence of the Molalla River. Drift Creek drains from the Pudding River, which drains from the Molalla River, a Willamette River tributary.

- c. Whether the project will be off-channel or on-channel.

The project will be an on-channel reservoir.

- d. Water availability to meet project storage. (Typically, the Department evaluates new storage projects using a 50 percent water availability analysis.)

Based on 50% exceedance factor, the Oregon Water Resources Department (WRD) data results in the calculation that an average of 12,300 acre feet are available for storage. The total runoff, according to WRD records, is 30,600 acre feet. The need identified for instream flow is 17,800 acre feet. A total of 581 acre feet is identified as existing consumptive use or storage.

- e. Proposed purposes and uses of stored water.

The East Valley Water District is an irrigation district established for the benefit of member lands and associated agricultural operations in Marion and Clackamas Counties, in the general vicinity of Mt. Angel. The district has been developing studies for a dam which would impound at least 12,000 acre feet of water on Drift Creek. The facility would be the cornerstone of a new surface water supply system for the district. Stored winter water could be released during summertime months and used for irrigation purposes, serving the district's approximately 50 members. The district service area is approximately 15,000 acres within a 50,000 acre gross boundary. The district's primary service area extends northerly from just north of Silverton to just south of Woodburn and Molalla.

District members are currently served by individual farm wells and direct withdrawals from local surface waters. Limited surface water supplies and lowering groundwater levels make the development of a new surface water source imperative to produce current or better crop yields. The stored water will provide a stable water supply to supplement existing groundwater rights and to provide a permanent water right for current usage now under time-limited permits and temporary transfers.

The stored water may have a secondary impact of improving water quality. Analysis of water quality data on Drift Creek and the Pudding River identifies that releasing water from the middle depths of the reservoir may improve downstream water quality. The proposed reservoir is expected to stratify during the summer months for this to occur. Stored water releases may allow for better scheduling of flows for fishery migration.

- f. Environmental flow needs and water quality requirements of supply source water bodies.

Certificate 72591 with a priority date of October 18, 1990, is held by the WRD as an instream water right for the purpose of providing required streamflows for cutthroat trout for migration, spawning, egg incubation, fry emergence and juvenile rearing, to be maintained in Drift Creek from East and West Forks of Drift Creek at river mile 11.0 to the mouth at river mile 0.0. The certificate does not indicate water quality requirements. The net water available after deducting the instream requirement is 12,300 acre feet at 50% exceedance, according to the WRD's records identified in the water availability report from the Water Rights Information System.

6. Provide a review of the local, state, and/or federal permitting requirements and issues posed by the implementation of the project associated with the planning study.

During the planning study, data to complete the following permits for the project will be assessed as detailed below. No additional permits are required to conduct the studies. The district has had the cooperation of landowners in providing access as necessary to study areas.

1) The federal Clean Water Act requires a permit from the Oregon Department of Environmental Quality (DEQ), with review and approval by the state that conforms to the U.S. Environmental Protection Agency (EPA) needs to develop water quality standards to prevent pollution of surface waters. Oregon water quality standards require temperature parameters to protect beneficial uses in state waters. Drift Creek is identified on DEQ's 303(d) list for exceeding temperature criteria for salmon and trout rearing and migration, but is not listed for any other parameter than temperature. A 401 water quality permit will be required as well from DEQ and a 1200-C erosion control permit may be required from the agency.

2) A water right application will be provided to the Oregon Water Resources Department (WRD) for storage. An additional water right for use of the stored water for agriculture purposes will be required to supplement current water rights used by the irrigators of the district. The storage permit will require substantial documentation of flows, including analyses of runoff yields, bypass and ecological flows, optimum peaks, existing rights, instream rights under administrative protection, flow exceedance parameters, geotechnical analysis, and dam safety. Within that process, other natural resource agencies will provide feedback relative to fish and wildlife protection and other issues determined in agency reviews that are part of the WRD process.

3) A waiver for fish passage will be required from the Oregon Fish and Wildlife (ODFW) Commission. If the waiver is not approved, appropriate passage requirements will apply.

4) Appropriate land use permits will be required from Marion County once the final location and boundaries for the project are determined. Additional permits may be required for any crossings of roads, railway or existing utilities, grading and construction. While the reservoir is sited in Marion County, some of the farms served are in Clackamas County. If pipeline delivery placement or other changes require any permits from Clackamas County, those will also have to be obtained.

- 5) *Access to the site has been provided by landowners during previous studies and the district anticipates that access will continue to be agreeable to any involved landowners.*
- 6) *A fill and removal permit will be required from the Oregon Division of State Lands in correlation with the U.S Army Corps of Engineers.*
- 7) *Final approval from the Oregon State Historical Preservation Office (SHPO) will be required once all cultural resource analysis is complete.*
- 8) *Final mapping of wetland delineation will be required to meet the requirements of the Division of State Lands Department and define mitigation.*
- 9) *Review by NOAA Fisheries Service and ODFW will be required regarding migration, species inventory and count, habitat survey, and passage requirements. It is anticipated that a biological assessment (BA) will be required for threatened Upper Willamette River Steelhead.*
- 10) *FEMA (Federal Emergency Management Act) requires a permit to include a flood control plan, dam safety features, water release scheduling, controls to diminish chance of overtopping or breaching, and review of any potential geo-hazards.*

V. Match Funding Information

Applicants must demonstrate a minimum dollar-for-dollar match based on the total funding request. The match may include a) secured resources, b) previously expended resources, and/or c) pending resources. For secured funding, you must attach a letter of support from the match funding source that specially mentions the dollar amount shown in the "Amount/Dollar Value" column. For pending resources, documentation showing a request for the matching funds must accompany the application. For resources that have been previously expended, the expenditure must have occurred on or after July 1, 2005. Resources expended prior to July 1, 2005 are not eligible for match purposes.

The Type of matching funds may include:	The Status of matching funds may include:
<ul style="list-style-type: none"> The value of in-kind labor, equipment rental and materials essential to the planning study provided by the applicant or partner*. 	<ul style="list-style-type: none"> Secured funding commitments from other sources.
<ul style="list-style-type: none"> Cash is direct expenditures made in support of the planning study by the applicant. 	<ul style="list-style-type: none"> Associated and documented expenditures for the planning study from non-program sources incurred on or after July 1, 2005.
	<ul style="list-style-type: none"> Pending commitments of funding from other sources. In such instances, Department funding will not be released prior to securing a commitment of the funds from other sources. Pending commitments of the funding must be secured within 12 months from the date of the award.

*"Partner" means a non-governmental or governmental person or entity that has committed funding, expertise, materials, labor, or other assistance to a proposed planning study. OAR 690-600-0010.

Match Funding Source (if in-kind, briefly describe the nature of the contribution)	Type (✓ One)	Status (✓ One)	Amount/ Dollar Value	Date Match Funds Available (Month/Year)
<i>Administrative oversight of project management during study process July 1-2005 to present provided by East Valley Water District (EVWD)</i>	<input type="checkbox"/> cash <input checked="" type="checkbox"/> in kind	<input type="checkbox"/> secured <input checked="" type="checkbox"/> expended <input type="checkbox"/> pending	\$46,300	
<i>Consultant studies between July 1, 2005 and August 31, 2008, paid by EVWD</i>	<input checked="" type="checkbox"/> cash <input type="checkbox"/> in kind	<input type="checkbox"/> secured <input checked="" type="checkbox"/> expended <input type="checkbox"/> pending	\$105,589	
<i>Administrative oversight of project management during future studies provided by EVWD</i>	<input type="checkbox"/> cash <input checked="" type="checkbox"/> in kind	<input checked="" type="checkbox"/> secured <input type="checkbox"/> expended <input type="checkbox"/> pending	\$37,500	January 09
<i>Consultant Studies as outlined for 2009 and 2010; cash on hand provided by EVWD</i>	<input checked="" type="checkbox"/> cash <input type="checkbox"/> in kind	<input checked="" type="checkbox"/> secured <input type="checkbox"/> expended <input type="checkbox"/> pending	\$75,000	September 08
<i>Accounts Receivable - February 2009 Assessments from water users of EVWD</i>	<input checked="" type="checkbox"/> cash <input type="checkbox"/> in kind	<input type="checkbox"/> secured <input type="checkbox"/> expended <input checked="" type="checkbox"/> pending	\$242,621	February 2009
	<input type="checkbox"/> cash <input type="checkbox"/> in kind	<input type="checkbox"/> secured <input type="checkbox"/> expended <input type="checkbox"/> pending		
	<input type="checkbox"/> cash <input type="checkbox"/> in kind	<input type="checkbox"/> secured <input type="checkbox"/> expended <input type="checkbox"/> pending		
	<input type="checkbox"/> cash <input type="checkbox"/> in kind	<input type="checkbox"/> secured <input type="checkbox"/> expended <input type="checkbox"/> pending		
	<input type="checkbox"/> cash <input type="checkbox"/> in kind	<input type="checkbox"/> secured <input type="checkbox"/> expended <input type="checkbox"/> pending		
	<input type="checkbox"/> cash <input type="checkbox"/> in kind	<input type="checkbox"/> secured <input type="checkbox"/> expended <input type="checkbox"/> pending		

VI. Project Planning Study Schedule

Estimated Project Duration: January 1, 2009 to December 31, 2010

Place an "X" in the appropriate column to indicate when each element (key task) of the project will take place.

Project Planning Study Element (Key Tasks)	2009				2010				2011 & Beyond
	1 st Qtr	2 nd Qtr	3 rd Qtr	4 th Qtr	1 st Qtr	2 nd Qtr	3 rd Qtr	4 th Qtr	
<i>ESA Compliance</i>	X	X	X	X	X				
<i>Fishery/Impact/Instream Flows</i>	X	X	X	X	X	X	X	X	
<i>Wildlife and Avian Review</i>	X	X							
<i>Fish Passage Waiver/Fish Passage Review</i>	X	X	X	X	X	X	X	X	
<i>Wetlands Mapping and Delineation</i>	X	X							
<i>Cultural Resources</i>	X				X	X			
<i>Permitting and E/A</i>	X	X	X	X	X	X	X	X	
<i>Review of Reservoir Sizing, Land Use, Easements</i>	X	X	X	X	X	X	X		
<i>Review of Alternative Water Supplies</i>	X	X							
<i>Analysis of Water Delivery System</i>	X	X	X	X	X	X	X		
<i>Design of Mitigation Strategies</i>	X	X	X	X	X	X	X		
<i>Instream Analysis and Water Modeling</i>	X	X	X	X	X	X	X	X	

Project Planning Study Budget

Section A

Please provide an estimated line item budget for the project planning study. An example would include: labor, materials, equipment, contractual services and administrative costs.

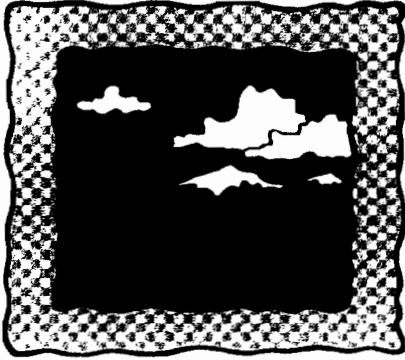
Line Items <i>Note: Administrative costs may not exceed 10% of the total funding requested by the Department.</i>	Unit Number (e.g. = of hours)	Unit Cost (e.g. hourly rate)	In-Kind Match	Cash Match Funds	OWRD Grant Funds	Total Cost
Contracted Consultant Services Paid by district for period 7/1/2005-8/31/2008			\$46,300	\$105,589		\$151,889
District administration 2009-20010 Labor			\$37,500		\$37,500	\$75,000
Additional Studies and Enginnering 2009-2010 Consultant Contracted Services				\$317,621	\$462,500	\$780,121
Administrative Costs						
Total for Section A			\$83,800	\$423,210	\$500,000	\$1,007,010
Percentage for Section A			8	43	49%	100%

Section B

If Grant amount requested is \$50,000 or greater, you **MUST** complete Section B. Elements (key tasks) in Section B should be the same as the elements (key tasks) in Section VI (Project Planning Study Schedule).

Project Planning Study Element (Key Tasks)	In-Kind Match	Cash Match Funds	OWRD Grant Funds	Total Cost	
ESA Compliance Study		\$10,680	\$10,680	\$21,360	
Fishery Impacts/Instream Flows		\$37,250	\$37,251	\$74,501	
Wildlife and Avian Review		\$5,673	\$5,672	\$11,345	
Fish Passage Waiver/Fish Passage Review		\$28,615	\$28,615	\$57,230	
Wetlands Mapping and Delineation		\$17,105	\$17,105	\$34,211	
Cultural Resources		\$2,579	\$2,579	\$5,158	
Permitting and Biological Assessment		\$38,098	\$38,098	\$76,195	
Engineering Services Contract					
Review of reservoir sizing, mapping, easements, land use		\$41,000	\$79,400	\$120,400	
Pre-Construction engineering/economic feasibility		\$17,592	\$78,358	\$95,950	
Analysis of water delivery system		\$49,000	\$49,681	\$98,681	
Design of mitigation strategies (fish passage)		\$54,350	\$99,380	\$153,730	
Instream analysis and water modeling		\$15,679	\$15,681	\$31,360	
Administration, Prior 2005-2008	\$46,300			\$46,300	
Prior studies on geology, ecology, wetlands identification, cultural resources, fishery inventory, ESA Compliance		\$105,589		\$105,589	
Administration	\$37,500		\$37,500	\$75,000	
Total for Section B		\$83,800	\$423,210	\$500,000	\$1,007,010

Totals in Section B must match the totals in Section A



East Valley Water District

P.O. Box 1046 MT. ANGEL, OR. 97362

September 1, 2008

Mr. Bob Rice
Oregon Department of Water Resources
725 Summer Street NE
Suite A
Salem, OR 97301

RE: East Valley Water District SB 1069 Grant Application

Dear Mr. Rice,

The East Valley Water District has spent \$105,589 on engineering and consultation services on the Drift Creek Project between July 1, 2005 and August 31, 2008. A spreadsheet is attached showing expenditures by category. Prior to any release of funds, the district can provide a full account of individual invoices if the department feels that would be helpful.

The district has \$75,000 in current assets on hand to match the cost share upon receipt of the grant.

In February, 2009, the district will assess its water users for the remaining cash cost share required. We understand that before any grant funds can be disbursed the district will have to substantiate that it has the cost share funds to proceed with the net level of work.

Please call if I can provide any further documentation or information.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kristina McNitt', with a long horizontal flourish extending to the right.

Kristina McNitt
East Valley Water District

**EAST VALLEY WATER DISTRICT
DRIFT CREEK
EXPENSES**

JULY 1, 2005 - AUGUST 31, 2008

	2005	2006	2007	2008	TOTAL
Engineering Review & Development	11,405.38	9,078.62	1,165.88	\$ 9,550.81	31,200.69
Geology Research & Development	5,508.50				5,508.50
Legal	9,433.81	1,527.19			10,961.00
Pipeline Development	5,000.00				5,000.00
Environmental Review & Development		47,501.91			47,501.91
Hydrology Evaluation			3,580.00	\$ 1,837.00	5,417.00
	\$ 31,347.69	\$ 58,107.72	\$ 4,745.88	\$ 11,387.81	\$ 105,589.10



PIONEER TRUST BANK

For 24 HR Info 1-888-507-8784

EAST VALLEY WATER DISTRICT 30
PO BOX 1046 0
MT ANGEL OR 97362 0

=====
MAIN OFFICE
109 COMMERCIAL ST NE
SALEM OR 97301

TELEPHONE: 503-363-3136
=====



		LAST STATEMENT 06/30/08	87,360.00
MINIMUM BALANCE	87,360.00	CREDITS	.00
AVG AVAILABLE BALANCE	87,360.00	DEBITS	.00
AVERAGE BALANCE	87,360.00	THIS STATEMENT <u>07/31/08</u>	87,360.00

- - - ITEMIZATION OF NSF PAID AND RETURNED ITEM FEES - - -

	THIS PERIOD	YEAR TO DATE
NSF PAID ITEM FEE:	.00	.00
NSF RETURNED ITEM FEE:	.00	.00
OVERDRAFT FEES:	.00	.00

- END OF STATEMENT -

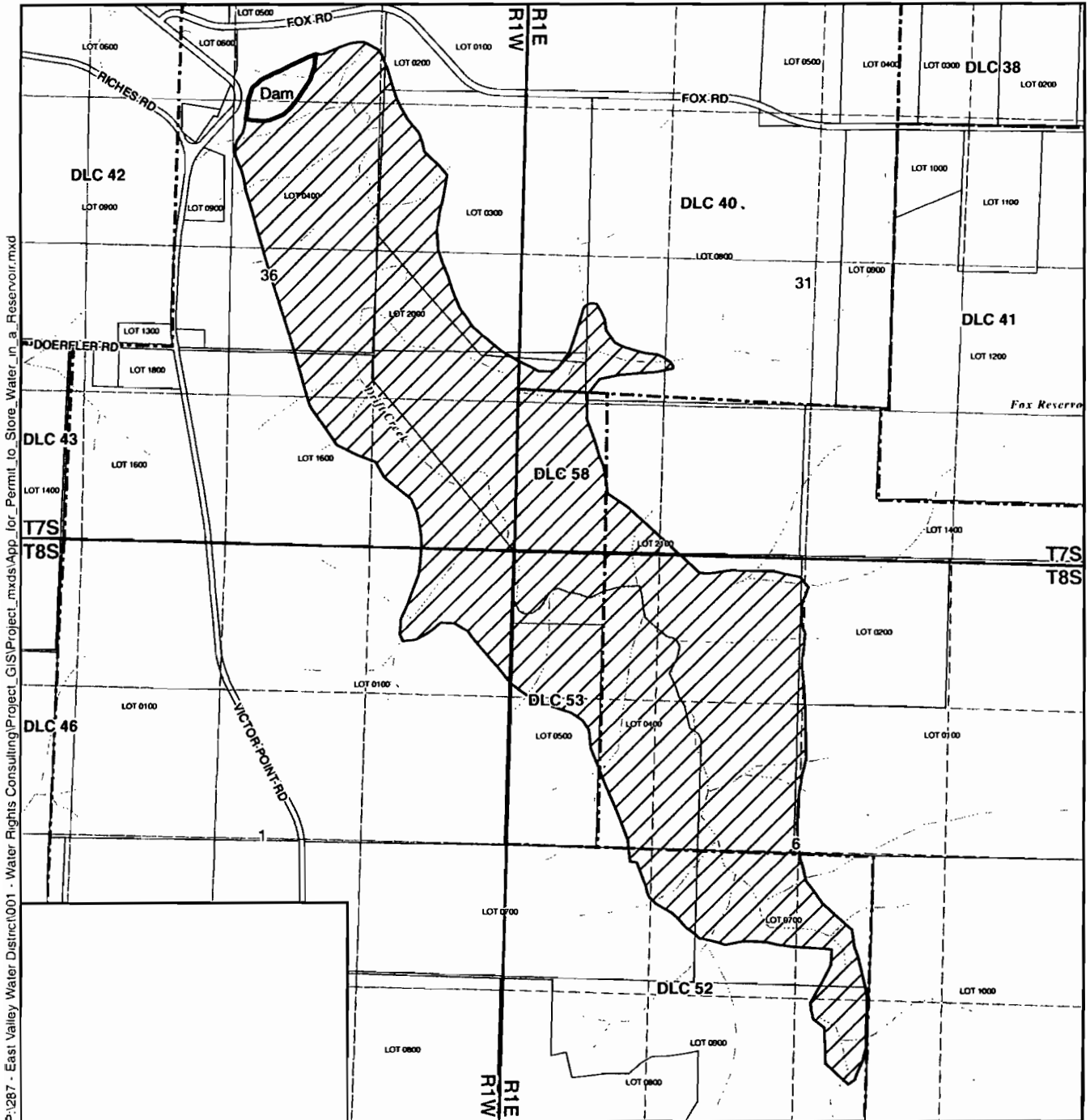
*Must rent bank
Statement*

East Valley Water District
Balance Sheet
As of August 31, 2008

	<u>Aug 31, 08</u>
ASSETS	
Current Assets	
Checking/Savings	
Checking	74,862.54
Total Checking/Savings	74,862.54
Accounts Receivable	
Accounts Receivable	-42.00
Total Accounts Receivable	-42.00
Total Current Assets	74,820.54
TOTAL ASSETS	<u>74,820.54</u>
LIABILITIES & EQUITY	
Equity	
Retained Earnings	20,233.12
Net Income	54,587.42
Total Equity	74,820.54
TOTAL LIABILITIES & EQUITY	<u>74,820.54</u>

Application for a Permit to Store Water in a Reservoir In the Name of: East Valley Water District

**Section 36, Township 7 South, Range 1 West (W.M.); Section 31, Township 7 South, Range 1 East (W.M.);
Section 1, Township 8 South, Range 1 West (W.M.); Section 6, Township 8 South, Range 1 East (W.M.)**



P:\287 - East Valley Water District\001 - Water Rights Consulting\Project_GIS\Project_mxd\App_for_Permit_to_Store_Water_in_a_Reservoir.mxd

Legend

- Proposed Dam
- Proposed Reservoir
- Tax Lots
- Existing Waterbodies
- Existing Watercourses

Location Description for Proposed Dam

Proposed Dam
Located 1,225 feet South and 355 feet East from the N1/4 corner of Section 36, Township 7 South, Range 1 West (W.M.)

Data Sources
Marion County GIS, Oregon Geospatial Data Clearinghouse

Disclaimer
This map was prepared for the purpose of identifying the location of a water right only and it is not intended to provide legal dimensions or location of property ownership lines.



Scale
0 330 660 1,320
1 inch equals 1,320 feet





200 Industrial Way
PO Box 258
Mt. Angel, OR 97362

Main 503.845.6122
Toll-free 800.382.5339
FAX 503.845.9310
WEB www.wilco.coop

September 2, 2008

Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301

Attention: Bob Rice
Water Conservation, Reuse and Storage Grant Program

Dear Mr. Rice:

The East Valley Water District is submitting a grant application requesting \$500,000 to fund additional studies necessary to develop a water storage facility on Drift Creek in Silverton, Oregon. Wilco strongly supports your favorable consideration of this critical funding request.

Wilco is a grower owned farm supply cooperative providing agronomy products and services, farm and retail petroleum, and specialty retail farm stores in the Willamette Valley. Growers in the Willamette Valley consistently out-perform all other regions in gross production values. In 2007, gross farm and ranch sales data for Marion County, alone, exceeded all other Oregon counties at \$479,784,000. Water is a critical component of this high-value, production agriculture. In the case of the East Valley Water District, the issue is not about developing new water for new land, but keeping existing growers in the business of producing valuable, irrigated agricultural crops.

Currently, district growers face a water shortage and a number of the growers in the district hold conditional water rights which may not be renewed in the future. The water use is within a "groundwater limited area" so there are few alternatives for seeking additional water supply. The storage project site the district has been pursuing has been identified as the most economical opportunity for the district to provide an adequate water supply for its growers.

Wilco supports the district's application as a good solution to what will become a very difficult future issue for area agricultural water users.

Sincerely,


Douglas N Hoffman
President & CEO



NORPAC FOODS, INC.

930 W. Washington
PO Box 458
Stayton, OR 97383-0458
(503) 769-2101

September 2, 2008

Water Resources Department
725 Summer Street NE, Suite A
Salem, OR 97301

Attn: Bob Rice
Water Conservation, Reuse and Storage Grant Program

The East Valley Water District is submitting a grant application under the SB 1069 program requesting matching funds for additional studies necessary to develop a water storage facility in Silverton, Oregon.

Many of the growers who produce for NORPAC are members of The East Valley Water District, where agricultural activities are threatened by over appropriated surface water, limited groundwater supplies and declining basalt aquifer levels.

Irrigated agricultural activities are a vital economic element in the State of Oregon. The capture of seasonal surplus water only makes sense to conserve currently stressed groundwater resources and provide a stable and environmentally sound source of water for this important activity in the state.

I am writing to urge your selection and full funding of this important request. NORPAC Foods, its growers, employees, and customers depend on the availability of a sustainable supply of high quality vegetables grown in this rich and productive area of our state. If the State of Oregon is truly supportive of a "grow and buy local" goal, then development of these basic supportive resources must be an underlying principle it follows. Thank you for your consideration.

Sincerely,

George F. Smith
President & CEO



CLACKAMAS COUNTY

Soil and Water Conservation District

August 29, 2008

Mr. Bob Rice
Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301

Re: East Valley Water District Application - Water Conservation, Reuse and Storage Grant Program

Dear Mr. Rice:

This letter confirms our support of the East Valley Water District's grant application for additional studies to develop a water storage facility to serve the irrigators within its district. Farmers within the district boundaries irrigate crops in both Clackamas and Marion counties.

Currently the district's farmers face a significant water shortage. Some of the farmers in the district have only conditional water rights which may not be renewed in the future. The water use is within a "groundwater restricted area" so there are few alternatives for seeking additional water supply. The storage project site the district has been pursuing has been identified as the most economical opportunity for the district to provide an adequate water supply for its farmers.

This project will provide both a water supply and a conservation benefit as the reservoir will deliver water to the district farmers using a piping system to support conservation benefits.

Thank you for your consideration of East Valley Water District's proposal.

Sincerely,

A handwritten signature in black ink, appearing to read "Rick Gruen", written over a horizontal line.

Rick Gruen
District Manager
Clackamas County Soil and Water Conservation District



650 Hawthorne Ave. SE # 130 – Salem, OR 97301 – Phone 503-391-9927 – FAX 503-399-5799

September 2, 2008

Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301

Attention: Bob Rice
Water Conservation, Reuse and Storage Grant Program

Dear Mr. Rice:

The Marion Soil and Water Conservation District (SWCD) supports the East Valley Water District in submitting their grant application for additional studies to develop a water storage facility to serve the irrigators within its district.

Keeping Oregon's agricultural alive depends on having enough water for farmers. The Marion SWCD believes that by supporting other special districts like East Valley to find solutions to an ever increasing demand in the need for water is crucial. By acquiring state dollars, through grants and other earmarks, only increases their ability to then leverage federal dollars.

With so many district irrigators facing a shortage of water and a number of the farmers in the district having only conditional water rights, which may not be renewed in the future, it is imperative that they find additional funding to help them solve their water storage problems. These farmers face few alternatives for seeking additional water supplies since the water use is within a "groundwater restricted area". Therefore, the storage project site the district has been pursuing has been identified as the most economical opportunity for the district to provide an adequate water supply for its farmers.

We offer our support of the district's application as a good solution to what will become a very difficult future issue for the agricultural water users in the years ahead. Oregon needs to continue to support agricultural by making available funds for studies such as this one.

Sincerely,


Douglas A. Krahmer, Chair *by DK*
Board of Directors

To protect, conserve and improve the quality of soil and water in Marion County through



September 2, 2008

Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301

Attention: Bob Rice
Water Conservation, Reuse and Storage Grant Program

Dear Mr. Rice:

The East Valley Water District has submitted a grant application established under SB 1069 requesting matching funds for work on its Drift Creek water storage project in Silverton, Oregon. We jointly support funding this grant application.

The Drift Creek project is a proactive effort initiated by the district to develop an alternate water supply within the area of Silverton, Mt. Angel and Molalla. The district includes water users within the Glad Tidings, Mount Angel and Victor Point groundwater-limited areas. The project seeks to develop water for existing farmers and alleviate usage pressure on declining aquifers.

The Oregon Farm Bureau and the Oregon Association of Nurseries actively lobbied for passage and funding of SB 1069 to establish the Water Conservation, Reuse and Storage grant program. The East Valley Water District's Drift Creek project demonstrates the type of need and collaborative effort we envisioned and believe it meets the fundamental intent behind SB 1069.

It will be important to promote the Water Conservation, Reuse and Storage grant program by showing success through its funded projects. We believe the East Valley Water District project is a good candidate for funding and would provide the Department with an excellent snapshot of existing water needs – even in the Willamette Valley – that would help illustrate the program to policy makers.

We urge support and full funding of the East Valley Water District grant application.

Sincerely,

Katie Fast
Oregon Farm Bureau

Jeff Stone
Oregon Association of Nurseries