



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

RECEIVED

SEP 02 2008

WATER RESOURCES DEPT
SALEM, OREGON

I. Grant Information

Project Name: Calapooia River-Sodom Ditch Water Resource Conservation and Management Project

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

Program Funding Dollars Requested: \$ 199,100 Total cost of planning study: \$ 398,200
Note: Request may not exceed \$500,000

II. Applicant Information

Table with 2 columns: Applicant Name: Calapooia Watershed Council, Co-Applicant Name: (blank), Organization, Address, Phone, Fax, Email.

Table with 2 columns: Fiscal Officer Name: Jennifer Held, Principle Contact: Tara Putney, Council Coordinator, Organization, Address, Phone, Fax, 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: Bud Baumgartner Date: 9/02/08
Print Name: BUD BAUMGARTNER Title: COUNCIL CHAIR

III. Planning Study Summary

Please give a brief summary of the planning study using no more than 150 words. The Calapooia Watershed Council has partnered with state and federal agencies and landowners to address fish passage impairment at Sodom Dam through dam removal. This diversion dam has historically ensured that flows continue down both the Calapooia River and Sodom Ditch. Without the dam, the river would go dry during summer months. Therefore this planning study will utilize extensive hydrologic and geomorphic study to develop a flow management plan that examines the entire affected system. Ecological flows for ESA listed spring Chinook and winter steelhead are vital for the Calapooia River along this 10 mile stretch below the bifurcation, and it's important to utilize recently secured instream rights. Water conservation is crucial to ensure private landowners' water rights are satisfied as well.

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## 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.)

*In the middle Calapooia Watershed, Sodom Ditch was built in the 1880s to serve as a high water diversion to minimize flooding and divert water around the Thompson's Mills complex. Oregon Parks and Recreation Department (OPRD) purchased the property in 2004 and has been working to address the complex flow issues. There are three dams associated with the millrace and Mills. However Sodom Dam is the most significant fish passage barrier in the entire Calapooia watershed. OPRD received limited funding from NOAA and OWEB to implement dam removal, but has since recognized that a more sophisticated investigation must take place to ensure that once the Sodom Dam is removed, water will continue to flow down the Calapooia River. OPRD's contracted consultants explored a number of fish passage alternatives to the dam, but unfortunately an adequate study has not been performed by OPRD's former consultants to fully understand the Calapooia River-Sodom Ditch complex. For water conservation and flow management purposes at the Calapooia River-Sodom Ditch bifurcation, the following planning study tasks and timeline are required:*

*Spring 2008 Task 1 – Geomorphic Analysis*

*Spring 2008 Task 2 – Site Survey*

*Summer 2008 Task 3 – Hydraulic Modeling*

*Summer 2009 Task 4 – 30% Conceptual Design*

*Fall 2009 Task 5 – Final Water Conservation Design*

*On-going Task 6 – Stakeholder communication and Technical Team planning meetings*

- b. When the planning study could begin.

*Preliminary site reconnaissance and research may begin this winter 2009 when funding is received, with major field work beginning once flows subside in mid-spring 2009.*
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.

*The Calapooia Watershed Council (CWC) has a history of successfully implementing complex fish passage projects involving numerous stakeholders including the recent Brownsville Dam Removal Project, which necessitated water supply maintenance through development of an on-site irrigation pump station to deliver water to the City of Brownsville. The Council has already contracted with Denise Hoffert-Hay to provide project management services for this large endeavor. Denise is currently the Brownsville Dam Removal Project Manager. She now has an extensive background with small dam removal and irrigation diversion designs, project permitting and implementation. Denise recently completed the Oregon Watershed Enhancement Board's Small Dam Removal Guide Book (OWEB, 2008).*

*A technical assistance provider has been selected by the CWC's Management Committee. River Design Group Inc. has technical expertise in the following areas that will be required for this planning study: fluvial geomorphology, ecology and fisheries biology, water resources modeling and engineering, and familiarity with the complexity of the hydrological and ecological issues associated with the Calapooia River-Sodom Ditch system. River Design Group has recently performed geomorphic studies and hydrologic analysis on the Calapooia immediately upstream of the study area for another Council project. The Project Engineer, Scott Wright, was previously employed by NRCS as a Water Resources Engineer and is therefore acquainted with and well respected by the landowners in the Project area. The CWC is confident that River Design Group has the technical expertise, familiarity with the Calapooia fluvial dynamics, and reputation with the stakeholders, to complete this sophisticated planning study successfully, within budget, and according to the project timeline.*

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

*The planning study phase would not require permits, although all permitting agencies will be invited to attend Technical Team meetings throughout the duration of the flow management study to ensure the alternatives analysis and design phase reflect permitting agencies' requirements.*

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.

*No permits are required for the planning study of this project.*

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 Council intends to investigate water conservation strategies to accompany the removal of the Sodom Dam, a project that has already been funded by the State of Oregon. This diversion dam currently creates a backwater effect that stretches to the bifurcation point (Sodom Ditch-Calapooia River split 1600' upstream) that raises the height of the water so that flows can access the Calapooia River. Flows are diverted from the Calapooia River by another dam (Shear Dam) and through a millrace to Oregon Parks and Recreation Department's Thompson's Mills site. The flow split at the bifurcation is approximately a 1:3 flow ratio, with the majority of the flows in the Sodom Ditch. If a water conservation solution is not developed for this project, all flows will be in the Sodom Ditch once the dam is removed and the Calapooia River will be dry most summer months. The goal of this project is to develop an alternative means of supplying water in the Calapooia channel other than a diversion dam in order to deliver water to OPRD and other water users, to maintain the best use of valuable instream water rights (12 cfs), and maintain ecological flows in the Calapooia channel considering its high quality fish habitat, as reported by ODFW staff. The Council will continue to partner with Oregon Parks and Recreation Department, as well as other stakeholders during the planning study to arrive at a diversion solution that conserves water in the river and furthers the State's relationship with the local farming community. The Council intends for this fish passage-water conservation project to serve as a model for the State of Oregon as these types of projects become high priority and are addressed through the grassroots process.*

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

### *Spring 2008 Task 1-Geomorphologic Analysis*

*A detailed analysis will be developed for the Calapooia channel and a review of the existing Sodom Ditch analysis will be completed by River Design Group, Inc. (RDG) in order to fully evaluate the system. The geomorphologic assessment will result in a document that details how river processes shape the existing system and provide insight into future conditions and water conservation scenarios. Task 1 items will include mapping the following: bank erosion, bank stabilization, sedimentation, vegetation conditions, and potential flood impact areas. Additional data collection items will be detailed following the fall 2008 stakeholder meeting. Results of the Task 1 effort will include:*

- Geomorphologic data for the Sodom Ditch and Calapooia River in the target area.*
- Geomorphologic maps displaying field data pertinent to stakeholder concerns and river characterization.*
- Establishing a ground photo library referenced to river alignment stationing for tracking future Calapooia River changes. The library will be similar to the one developed by Inter-Fluve for the Sodom Ditch as funded by OPRD in 2007.*
- A report summarizing river corridor function to include the influence of historical and current river management, land use, channel stability, and future management issues.*
- Meeting with stakeholders to discuss assessment (funded by the Council).*

### *Spring 2008 Task 2 – Site Survey*

*Field surveys will be conducted in order to supplement existing topographic data and LiDAR data to develop a hydraulic model. The survey data will rely on LiDAR data for the floodplain topographic information necessary for hydraulic modeling. Engineers will work closely with the LiDAR firm to set benchmarks throughout the project area that relate LiDAR data with field data. Several hydraulic cross-sections will be established in order to build and calibrate the hydraulic model. The hydraulic cross-sections will include a channel cross-section where stream flow is consistent and orthogonal, a discharge measurement, pebble count, and longitudinal profile to measure water surface and bankfull discharge slopes. Cross-sections will be completed to capture both the Sodom Ditch and the Calapooia River. Synoptic discharge measurements will be completed to evaluate the distribution of flows in the two channels to improve the accuracy of the hydraulic model. Channel bed materials will be sampled (Wolman pebble counts) in the project area to characterize existing bed material characteristics as well as to complement hydraulic and sediment transport modeling. Bank protection and grade control structures will be inventoried and reviewed in the field.*

*Results of the Task 2 effort will include:*

- Processed field data including channel surveys, pebble counts, and discharge data.*
- The field data integrated into the LiDAR data set.*
- Development of a topographic surface suitable for hydraulic modeling.*

### *Summer 2008 Task 3-Hydraulic Modeling*

*A one-dimensional steady state hydraulic model using HEC-RAS Version 3.1.3 will be developed. The model will be calibrated with several measured discharge from the field data collection effort. Calibration of the model is a critical step to enhance the accuracy of the model and ensure roughness coefficients are valid. The model will extend from the bifurcation point downstream to the confluence of the two branches.*

*Three different modeling scenarios must be developed for the area. One is for low flow conditions in the typical summer months to address fish passage primarily in the upstream direction. The second scenario is a high fish passage flow during winter months where the flow will likely be at or near bankfull discharge. The bankfull discharge model will evaluate velocities and fish passage issues. Finally, the third scenario is a peak flood model that addresses high magnitude flood events including the 50-year and 100-year return intervals. This model will focus on floodplain inundation and potential impacts to surrounding landowners.*

*Results of the Task 3 effort will include:*

- Hydraulic models and results for baseflow, bankfull discharge, and flood discharges.*
- A summary report detailing methods, results, and discussion.*
- Flood maps depicting water surface depths, velocities, and shear stress to identify areas of potential flood impacts.*
- Meeting with stakeholders to discuss hydraulic modeling output.*

*Summer 2009 TASK 4 – 30% Conceptual Design*

*RDG will prepare three potential project alternatives for stakeholders to consider. RDG will meet with project stakeholders to present the three alternatives. Presentation materials will include conceptual level schematics for maintaining the Sodom Ditch and Calapooia River channel and potential river management issues. Stakeholders will provide comments to RDG. Based on stakeholder comments and analysis, a preferred alternative will be selected. The preferred alternative will be developed to a 30% design. The design package will include refinement of the hydraulic model, a summary engineering design report, and completion of 30% construction drawing set. This package will be suitable to discuss project permitting issues with the regulatory agencies and will provide adequate documentation for contractors to give preliminary construction estimates and feedback on constructability.*

*Results of the Task 4 effort will include:*

- Prepare three project alternatives for stakeholder review. Alternatives will include conceptual plan set.*
- A summary report detailing methods, results, and discussion.*
- Flood maps depicting water surface depths, velocities, and shear stress to identify areas of potential flood impacts.*
- Present 30% conceptual plan to stakeholders for review and comments.*
- Meet with regulatory agencies to discuss 30% design.*

*Fall 2009 Task 5 – Final Design*

*RDG will prepare a final design accounting for river conditions, stakeholder comments, and regulatory agency input. The final design will be construction ready. The engineered plan set will include detailed site sheets, typical cross-sections, specifications, materials list, dewatering plan, and construction cost estimate. A companion report will be prepared to complement the plan set.*

*Results of the Task 5 effort will include:*

- Report that incorporates stakeholder and regulatory agency personnel comments.*
- Engineered plan set.*
- Companion summary design report for submittal to permitting agencies.*

- *A final meeting with the project stakeholders to present the design package.*

*On-going Task 6- Stakeholder Communication and Planning Meetings*

*OPRD's 2007 Sodom Ditch Dam Conversion Conceptual Design Alternatives Report emphasizes technical solutions for fish passage to a complex social and regulatory problem. Furthermore, there is little or no information contained in the report that pertains to impacts to surrounding landowners and or concerns that the stakeholders might have regarding potential project alternatives. This report may not have been commissioned to deal with social aspects of dam removal and fish passage, but the social interactions and concerns cannot be separated from the technical solution due to the fact that almost all solutions will require on-going participation and management by the surrounding landowners. To this extent, we feel that the first step in moving the project forward is an extensive outreach to the community and surrounding landowners along Sodom Ditch and the Calapooia River branch.*

*We anticipate several stakeholder meetings guided by the CWC to discuss what the stakeholders envision for long-term management of the area and to determine what types of technical information they need to see in order to move the project forward. RDG will provide technical input throughout the process to answer technical river management questions and provide information that will facilitate discussions.*

*The CWC also anticipates several meetings with permitting agencies such DEQ, ACOE, and DSL to ensure the water conservation alternatives analysis and final design address regulatory requirements. Project engineers with RDG will be involved in these Technical Team meetings to ensure their work is on-track and that there is clear communication for the duration of the planning study.*

*Results of Task 6 efforts will include:*

*Local knowledge of the managed water system, flows and floodplain dynamics incorporated into the planning study, which is very valuable input with respect to ground truthing of hydraulic modeling results.*

*Community engagement and buy-in on the selected alternative for water conservation and management, which will ultimately support a successful permitting and implementation process following the planning study.*

*A design for water conservation that agencies feel confident in permitting and the engineers are efficient in their design and analysis process.*

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.

*Numerous stakeholders in addition to the Council are interested in, committed to, and will be impacted by the planning study, including the following:*

*Oregon Parks and Recreation Department\**

*Oregon State Parks Trust*

*Calapooia Irrigation District*

*All landowners (primarily grass seed farmers) along the Calapooia River and Sodom Ditch, and specifically landowners with water rights along both streams*

*Oregon Department of Fish and Wildlife\**

*National Oceanic and Atmospheric Administration\**

*U.S. Fish and Wildlife Service*

*Department of Environmental Quality*

*Oregon Watershed Enhancement Board*

*\*Included in this application are this agency's letters of support for this Project's planning study.*

## Section B. Unique Criteria

**Instructions:** Answer the set of questions below that applies to the type of planning study that this grant will fund.

### Water Conservation or Reuse

1. Water Conservation or Reuse projects that may result from this planning study are requested to be included in the Water Resources Department's "Inventory of Potential Conservation Opportunities". Though you may have already submitted this information earlier in the year through a separate survey, we ask that all applicants complete the information on the form provided at the end of this application.  
 I have filled out the application or  I have not filled out the application.

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

*The Sodom Dam (and its flashboards) provides flow control to divert water into the Calapooia River during the low-flow season. If the Sodom Dam is simply removed the Calapooia River will dry up during summer months (July-October). There are a total of 169 cfs water rights that exist along the 10 mile segment of the Calapooia River that will be unmet without a flow management solution (water rights summary from OPRD available upon request). Only 6 cfs of water rights exist on the Sodom Ditch. Water must continue to be supplied to the Thompson's Mills millrace considering OPRD has acquired the most senior water right in the entire watershed. OPRD has agreed not to exercise their senior water right during summer irrigation months to continue to be a good neighbor and steward of their recently acquired resources. The Calapooia River supplies 9.26 cfs of permitted water rights during irrigation months as long as the 12 cfs instream water right at the bifurcation and 20 cfs instream water right in Albany are satisfied.*

*While removal of the dam itself presents the best option for fish passage on Sodom Ditch and is the solution funded by both state and federal agencies, fish passage for both the Sodom Ditch and Calapooia River requires an innovative flow diversion or control device at the bifurcation. ODFW identifies this reach of the Calapooia River as prime rearing habitat for ESA listed spring Chinook and winter steelhead, thus ecological flows must be maintained. The Calapooia River is becoming plugged with log jams and sediment has accumulated along most of the 10-mile segment, which presents another challenge in diverting ecological flows into the Calapooia. The recommended flow ratio (1:2), developed by the Thompson's Mills Technical Committee in October 2004 (Thompson's Mills Working Group - Recommendation of the Flow Management Technical Team - document available upon request) is not currently being met nor would it be met following the dam's removal without installing an innovative flow control device.*

3. Explain how the associated project will mitigate the need to develop new water supplies and/or use water more efficiently. Reference documentation and/or examples of the success of similar or comparable water conservation/reuse projects that would be available upon request.

*Water is a precious commodity in the Calapooia Watershed considering it is a low-elevation drainage system driven by rain events. The Oregon Water Trust facilitated the process of securing a 12 cfs instream water right with the most senior water rights in the watershed and regards the Calapooia Basin as a high priority basin. This water conservation project will*

*ensure that water will be delivered to the State at the OPRD site and to water users with rights along the Calapooia River indefinitely. There are practical means of supplying water to these constituents in the foreseeable future once Sodom Dam is removed if a water conservation study and design is developed in conjunction with dam removal. We must make the best use of the limited water supply in the Calapooia Basin, which will require ingenuity and innovation.*

4. 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 project associated with the planning study will meet 100% of the water supply needs. The minimum level in the Calapooia River during summer months as identified by ODFW staff and the Thompson's Mills Working Group is 12 cfs. This project is intended to deliver this amount if not more to the Calapooia River. If this project is not implemented in conjunction with the dam removal project, OPRD and landowners with water rights on the Calapooia River will not have water for about 6 months of the year.*

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.)  
*Willamette Basin; Calapooia Sub-Basin; Linn County; 13S 03W 27*
  - b. The name(s) and river mile(s) of the source water and what they are tributary to, if applicable.  
*River mile 28 of the Calapooia River, tributary of the Willamette River*
  - c. Environmental flow needs and water quality requirements of supply source water bodies and water bodies downstream of associated and/or affected return flows.

*The Thompson's Mills Technical Team, made up of staff and volunteers from Oregon Water Resources and Parks and Recreation Departments, NOAA, Oregon Water Trust, ODFW, Calapooia Watershed Council, and Calapooia Irrigation District, recommended in October 2004 that 12 cfs of the Mill's 1858 water right be transferred to the State for instream purposes due to high water temperatures and the limited amount of water naturally available in the basin. In extremely dry years the Technical Team predicted correctly that irrigators would face increased level of regulation. These environmental flow recommendations are still valid and OPRD has been managing the Mill and associated dams in the complex to ensure there is a minimum of 12 cfs flowing at all times to promote fish survival.*

- d. Reliance on return flows by downstream water right holders.

*Water rights holders downstream from Thompson's Mills on the Calapooia River rely on return flows from the millrace. Other than conveyance loss, all flows that are diverted from the Calapooia River into the millrace return to the stream after flowing through the Mill structure itself.*



*Request to be added to the Oregon Water Resources Department's*  
**Inventory of Potential Conservation Opportunities**

The purpose of this inventory is to catalogue potential conservation projects that water users themselves have identified but not yet pursued because of financial, institutional, or other barriers. For the purpose of this application, water storage other than above-ground are included as conservation opportunities and are most likely capital conservation projects.

As a water provider or user, you know your water demands and water conservation opportunities better than anyone. We would appreciate your assistance with this important data collection effort by completing this survey. Your participation will help provide the building blocks we need to begin to identify and achieve potential future water supplies. Please answer the questions as completely as possible, to the best of your ability. We appreciate your help with this important effort.

This inventory of already-identified, potential conservation projects includes both capital and programmatic projects. Capital projects are defined as one-time, large investments resulting in water savings. Examples include reclaimed water plants, reservoir covering, transmission line upgrades reducing leaks, or industrial engineering modifications to re-use process water. Programmatic projects are defined as ongoing investments resulting in water savings. Examples include facilitating upgrades to more efficient water using devices (e.g., distributing free showerheads, toilet rebates) and distribution system leak detection programs. The conservation inventory is primarily intended to include “planned” projects rather than projects that are currently being implemented. However, currently active programmatic projects may be listed if they will continue or expand in future years. The inventory of projects submitted will be compiled by county or basin.

Examples are provided below.

	<b>Example Capital Conservation Project</b>	<b>Example Programmatic Conservation Project</b>
<b>Project Description</b> Provide brief sentence	Line 3 miles of unlined ditch.	Toilet rebate program for residential customers
<b>Estimated Future Savings</b> Provide brief sentence, including information regarding savings seasonality.	20 acre feet of water per year	If we spend our full budget each year, we estimate 50,000 gallons of water save per year
<b>Seasonality</b> Indicate what part of the year savings are generated (e.g. year-round; summer only; etc.).	Peak (irrigation) season savings.	Savings should occur throughout the year.
<b>Estimated Future Costs</b> Provide brief sentence.	\$500,000 total project costs.	\$40,000 a year.
<b>Implementation Schedule</b> Provide brief sentence.	Not set. Have conducted cost and savings estimate, but still seeking funding.	We started the program in 2005 and plan to implement until 2015.
<b>Project Funded?</b> Designate either “yes”, “no”, or provide brief sentence if necessary	No. Pursuing grant funding.	Yes. IN our CIP through the next 5 years.

To add a project to the inventory of potential conservation opportunities, please provide the following information for each conservation project.

This is a <input checked="" type="checkbox"/> Capital Conservation Project <input type="checkbox"/> Programmatic Conservation Project	
<b>Project #/Name</b>	<b>Calapooia River-Sodom Ditch Water Resource Conservation and Management</b>
Project Description	Stream diversion and flow management project intended to continue to direct flows into both the Calapooia River and Sodom Ditch following dam removal to benefit water rights holders and ESA listed fish and other wildlife (ecological flows).
Estimated Future Savings	Unknown until design is completed- minimum flow of 12 cfs
Seasonality	Peak irrigation season
Estimated Future Costs	\$1.5 million-\$2.5 million
Implementation Schedule	Planning study winter 2009-winter 2010; implementation summer-fall 2010
What are the barriers to implementation, e.g. funding?	The number of stakeholders, both agency and landowner, interests and their conflicting nature.
This is a <input type="checkbox"/> Capital Conservation Project <input type="checkbox"/> Programmatic Conservation Project	
<b>Project #/Name</b>	
Project Description	
Estimated Future Savings	
Seasonality	
Estimated Future Costs	
Implementation Schedule	
What are the barriers to implementation, e.g. funding?	

- Include this form with your application -



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE

29 August 2008

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

To whom it may concern:

On behalf of the Restoration Center of the National Marine Fisheries Service, I offer enthusiastic support to the Calapooia Watershed Council's grant application to the Conservation/Reuse/Storage Grant Program.

The Restoration Center is committed to supporting habitat restoration efforts in the Calapooia Watershed, and has allocated \$659,000 to dam removal and habitat improvement efforts related to the Brownsville and Sodom Ditch Dams. The Watershed Council and other local and state partners have shown exemplary dedication to a holistic approach to watershed restoration that is inclusive and respectful of various stakeholder groups and communities who live, work, and play there. As testimony to these qualities and efforts, we presented the Watershed Council with the Restoration Center's "Excellence in Restoration" award in June of this year.

I encourage you to support their efforts at finding solutions to the environmental, social, and economic challenges they are addressing. Please feel free to contact me with any specific questions you may have.

Sincerely,

A handwritten signature in cursive script, appearing to read "Kerry Griffin".

Kerry Griffin  
Habitat Biologist, NOAA Restoration Center  
503.872.2738





# Oregon

Theodore R. Kulongoski, Governor

**Department of Fish and Wildlife**  
South Willamette Watershed District Office  
7118 NE Vandenberg Ave.  
Corvallis, OR 97330-9446  
(541) 757-4186  
FAX (541) 757-4252

August 29, 2008

Mr. Bob Rice  
Water Conservation, Reuse, and Storage Grant Program  
Water Resources Division  
725 Summer Street NE, Suite a  
Salem, Oregon 97301



Dear Mr. Rice:

The disposition of the Sodom Dam and how it will affect the Sodom Ditch and channel bifurcation with the main stem Calapooia River presents a dilemma for managing water flows between the two channels. Without the Sodom Dam, or something in its place, to regulate water flow in to the main stem, it is highly likely most water will flow through the Sodom Ditch and the main stem will dry. This is contrary to the natural flow patterns in this reach of the Calapooia River. Maintaining water flow in the main stem Calapooia River is imperative to fish and wildlife habitat along the channel. This reach of river between the bifurcations represents critical year round habitat for native fish and wildlife species as well as an important up and downstream migratory corridor for spring Chinook salmon, winter steelhead, cutthroat trout, and Pacific lamprey.

The Oregon Department of Fish and Wildlife fully supports the Calapooia Watershed Council's proposal for a technical assistance grant to the Water Conservation, Reuse, and Storage Grant Program in order to assess options for addressing flow management issues related to the Sodom Dam, Sodom Ditch and main stem Calapooia River. The Calapooia Watershed Council has proven itself an effective and valued participant on a wide range of watershed and natural resource issues. We look forward to our continued work with the Council and its staff toward our common goal of improving the watershed not only for fish and wildlife but for the people who live and work there as well.

Sincerely,

Karen Hans  
Fish Biologist



# Oregon

Theodore R. Kulongoski, Governor

## Parks and Recreation Department

725 Summer Street NE, Suite C

Salem, OR 97301-1266

(503) 986-0707

FAX: (503) 986-0794

[www.oregonstateparks.org](http://www.oregonstateparks.org)

September 2, 2008

Robert Rice  
Oregon Water Resources Department  
725 Summer Street, Suite A  
Salem, OR 97301



Nature  
HISTORY  
Discovery

Re: Calapooia River – Sodom Ditch Water Conservation & Management Project

The Oregon Parks & Recreation Department (OPRD) is the public agency that has responsibility and authority to operate, maintain and if necessary, modify or remove the Sodom Dam. The Sodom Dam is located on the Sodom Ditch, just downstream of the bifurcation of the Calapooia River. This letter is written in support of the Calapooia Watershed Council's Water Resource Conservation and Management Project grant request.

OPRD acquired Thompson's Mills in 2004. Along with this historic mill, OPRD acquired 180 cfs of water rights on the Calapooia River and responsibility for the Sodom Dam. Prior to OPRD ownership, the mill was owned and operated privately since its origination in 1858. Under private ownership, the mill and the dam were operated in such a manner as to generate as much revenue as possible. Under this regime, the Sodom Dam was critical to the operation of the mill.

With the mill and dam now being publicly owned as part of the Thompson's Mills State Heritage Site, the primary focus has shifted significantly. OPRD's goals are to preserve the mill, provide interpretive information to visitors and manage the operation of the mill and the dam in such a manner as to reduce or eliminate impacts to fish passage. Through a cooperative agreement, OPRD sold 12 cfs of its water rights (with an 1858 priority date) to create a permanent "in-stream" water right for fish passage. OPRD also agreed to place a seasonal restriction on its remaining water rights to not use them during the legal irrigation season.

In the past 1-1/2 years, OPRD has explored options for removing or replacing the Sodom Dam. OPRD has spent \$199,100 on consultant fees for various tasks of this investigation and analysis. The results of this effort indicate that additional investigation of water conservation and water management is necessary before possible dam removal options can be clearly established or understood. The Calapooia Watershed Council has agreed to take a lead role in this additional effort and OPRD will work with the Council in an advisory role. One of the key issues to resolve is that if the Sodom Dam is removed and there is no water conservation and management plan in place, then approximately 9 river miles of the Calapooia River will dry up in the summer months.

I appreciate your time and encourage you to approve this grant application.

Sincerely,

Darin Wilson, P.E.  
Project Manager