#### SOUTH SLOUGH RESERVE MANAGEMENT COMMISSION

#### **AGENDA**

South Slough National Estuarine Research Reserve South Slough Interpretive Center 61907 Seven Devils Road - Charleston, Oregon

#### July 24, 2008

#### 123rd REGULAR MEETING - 1:00-4:00 P.M.

- I. Call-to-Order
- II. Introductions
- III. Approval of the 122<sup>nd</sup> regular meeting minutes
- IV. Public Input\*
- V. Old Business
  - A. Progress on acquisition projects
  - B. State budget development 2009-2011
- VI. New Business
  - A. Approve goals of forest restoration strategy
  - B. Other
- VII. Informational
  - A. Administration
  - B. Education
  - C. Stewardship
  - D. Research
- VIII. Adjourn
- IX. Tour of SSNERR Facilities Winchester, Wasson, and Anderson Creek.

This meeting is being held in a facility that is accessible for persons with disabilities. If you need some form of assistance to participate in this meeting due to a disability, please notify Robin Elledge at 541-888-5558 ext. 23 at least two working days prior to the meeting.

<sup>\*</sup>Limited to 5 minutes each unless arranged in advance of the meeting.

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## SOUTH SLOUGH NATIONAL ESTUARINE RESEARCH RESERVE MANAGEMENT COMMISSION

South Slough Reserve Interpretive Center Charleston, Oregon

**DRAFT** Minutes of the 122nd Regular Meeting March 20, 2008 1:00 – 4:00 pm

#### Commission members present:

Richard Hamel Craig Young James Fereday Louise Solliday, Chair Mark Ingersoll George Boehlert

#### Commission members not present:

Ron Stuntzner Bob Emmett

#### South Slough NERR staff present:

Mike Graybill Kathy Andreasen
Pam Wilson Tom Elledge
Steve Rumrill Craig Cornu
Ali Helms Adam DeMarzo
Deborah Rudd John Bragg

#### Others present:

Norma Van Natta, FOSS Mike Gaul, OIPCB Nora Terwilliger, Advisory Norman Leeling, volunteer Bob Sleeth, volunteer Kathy Wall, OIPCB Jody Hamel, FOSS

The meeting was called to order at 1:00 p.m. by the Chair of the Commission, Louise Solliday. She announced that Mark Ingersoll the newly appointed member of the Management Commission to represent the Tribes, would be arriving a little late.

#### PUBLIC INPUT

Chair Solliday asked if there was any public input. There were no comments.

#### APPROVAL OF THE MINUTES OF THE PREVIOUS MEETING

Chair Solliday asked if there was a motion to approve the minutes of the previous meeting. Commissioner Young moved to approve the minutes of the previous meeting and Commissioner Fereday seconded the motion. The minutes were approved.

#### **OLD BUSINESS**

#### Adoption of Fee Rules and Fee Schedule

Chair Solliday turned the discussion over to Mike Graybill. Mr. Graybill said he would like to incorporate some of the comments suggested by the Commission at the previous meeting. The Commission agreed to delete the reference to the "Management Commission" and replace it with "SSNERR Manager" in section #4 regarding the waiver of fees under the heading "Fee Tiers". Mr. Graybill asked for clarification from the Commission on Ron Stuntzner's comment that the last sentence in section #3 of "Restricted Activities" regarding the Reserve's use of chemical fertilizers, herbicides or pesticides be edited. The Commission agreed to change the sentence to read: "Chemicals will be utilized for pest or weed control only after it has been determined that the nature and integrity of the ecosystem is endangered by the pests or the weeds."

Chair Solliday said the Commissioners' comments were so noted and she asked if there was a motion to adopt the Draft Fee Rules as amended. Commissioner Hamel moved to adopt the Draft Fee Rules and Commissioner Boehlert seconded the motion. The motion carried with all in favor.

Mr. Graybill asked for comments on the draft fee schedule for the inaugural (2008-2010) period. He explained that staff wished to start with a modest schedule of fees as the Reserve currently did not have any mechanism in place to collect fees, or any way to determine the programmatic impacts the fees might have. Commissioner Young suggested that the draft facility fee schedule be clarified to present fees on a per-night or per-person basis.

Chair Solliday asked if there was a motion to approve the Fee Schedule. Commissioner Boehlert moved and Commissioner Fereday seconded the motion to approve the Fee Schedule. The motion carried with all in favor.

#### **FOSS Annual Work Plan**

Chair Solliday explained that while it is within the purview of the Commission to review and provide input to Friends of the South Slough (FOSS) on their annual work plan, under state law a state body cannot control what a non-profit organization does. The Commission cannot approve the FOSS annual work plan; it is the function of the FOSS Board. The 5 year agreement between FOSS and the Reserve needs to be amended to remove the clause that requires the Reserve's Management Commission to approve the annual work plan of FOSS.

Rich Hamel, the current FOSS President, provided an update to the Commission. FOSS received notice that the Meyer Memorial Trust will award them \$9,000 to be used for match for the Reserve's Trails Project. FOSS also received an additional \$1,000 to fund the Trails Project from the local community as an anonymous donation. FOSS plans to fund the printing of 10,000 copies of the Reserve's site brochure in 2008. Dave Lunde was thanked for all of his work in the bookstore. Mr. Hamel recommended to the FOSS Board that they convene a committee of people from the local area to hear and consider ideas for future projects and the long range direction of FOSS.

Mr. Graybill said he would try to procure funds from NERRA to finance the participation of several FOSS Board members in the fall annual NERRS meeting to be held at the Elkhorn NERR in California.

Commissioner Mark Ingersoll arrived at 1:30 pm and Louise Solliday introduced him. All around introductions were made.

# Project Completion Reports: Large Woody Habitat in Tidelands and Sunset Bay Bacteria Study

#### Large Woody Habitat in Tidelands

Craig Cornu, one of the lead investigators in the OWEB funded study, gave a slide presentation on the results of the project which initially involved air lifting and placement of large spruce trees in tideland channels on the Reserve. The two year project (2005-2006) was designed to address the need for more information associated with the placement and function of large woody debris in estuaries. The South Slough NERR, Coos Watershed Association, and the Oregon Dept. of Fish and Wildlife collaborated on the project to evaluate the effectiveness of placing large woody debris in estuarine channels to provide improved habitat for juvenile salmonoids.

#### Sunset Bay Bacteria Study

Dr. Steve Rumrill gave a presentation on a collaborative research project, funded by the DEQ that he and Ben Grupe worked on in 2007. The project was conducted in cooperation with Oregon State University and the Oregon Department of Environmental Quality to address the frequent bacterial contamination health advisories at Sunset Bay. A short video created by John Bragg, Coastal Training Program Coordinator, was also shown to the Commission.

#### **NEW BUSINESS**

#### **Recognition of Volunteers**

The Management Commission formally recognized the contributions of volunteers to the South Slough NERR for the past year. The Commission expressed gratitude for all volunteers who have donated their time and care for the Reserve and its programs. Certificates and thank you letters signed by the Director and Commission Chair, Louise Solliday were distributed.

Public Involvement Coordinator, Deborah Rudd, was honored as FOSS Friend of the Year by the organization. Ms. Rudd reported that in 2007, the Reserve had over 4,700 volunteer hours valued at approximately \$82,000. South Slough Reserve works with about 30 regular volunteers, including FOSS board members, and hosts many one-time or seasonal volunteers involved in education and trail projects. Volunteers help the Reserve with a variety of activities including administration, education, bio-monitoring, landscaping, trail construction, fundraising, outreach, restoration, and data collection. Our volunteers also hosted a holiday benefit in December 2007 for a local youth organization that has contributed work to the trail system at the Reserve.

#### State Budget Development 2009-2011

Louise Solliday and Mike Graybill informed the Commission on the continued planning for the 2009-2011 Oregon biennial budget.

The Executive Team and Director of the Department of State Lands have prioritized Program Option Packages (POP) developed with input from managers and staff of the agency. The Program Option Packages are in final draft form. Should these Program Option Packages remain in the budget request and be included in the Governor's Recommended Budget to the Legislature, the Legislature will deliberate in the January 2009 session whether to incorporate them. If the requests are incorporated into the Legislatively Adopted Budget (LAB), the implementation date will be July 1, 2009 or when the LAB is signed. The following budget enhancement concepts have been included for the South Slough Reserve.

Package 102: South Slough Reserve continuation of limited duration positions. There are eight positions in this Program Option Package. The request will be to retain the positions through the next biennium, should funding be sustained.

Package 101: This package regards seven positions within the agency, six of which are not associated with the Reserve. One of the positions is

an ISS4 – the Reserve's Chief Technologist – and which will move to permanent status, funded by the Common School Fund and part of the agency's IT team, should this POP be successful. The position will remain stationed at the Reserve.

Package 108: One seasonal laborer and two seasonal interpretive services/visitor services positions will be established through this POP. Federal funds will support the salary costs. Additionally, funds to create a building maintenance account will be dedicated in order to implement a building maintenance schedule for the ongoing costs of painting, regular repair and replacement of equipment, fixtures and furnishings.

Package 109: The agency-wide information systems replacement and upgrade package includes funding for the sub-set technology implementation plan at the Reserve.

#### **NOAA Construction and Acquisition**

NOAA's Estuarine Reserves Division recently announced funding allocations for FY 2008. NOAA selected SSNERR's \$220,000 request to support acquisition of two small parcels in the upper Hidden Creek and North Creek watersheds.

Mike Graybill reported that the staff is presently working with the sellers and a certified appraiser to establish the current market value of the parcels NOAA has agreed to fund. When sale agreements are in place for the properties and the values are established, staff intends to use funds from the Chalmer Gustafson account to supplement NOAA funding and complete the transactions. The Department of State Lands' office of finance and administration has been instrumental in helping SSNERR secure legislative authorization to apply for the NOAA grants. SSNERR must now seek legislative authorization to receive and expend the funds linked to this project. The next meeting of the Legislative Emergency Board is June 12 and 13th. The Reserve seeks the Commission's authorization to appear before the Emergency Board to request expenditure limitation sufficient to receive and expend the NOAA funds as well as limitation from the Chalmer Gustafson account sufficient to augment the NOAA funding and complete the transactions.

Chair Solliday asked if there was a motion to proceed. Commissioner Fereday moved and Commissioner Boehlert seconded to accept the staff recommendation to work with the Department of State Lands to appear before the Legislative Emergency Board to secure sufficient expenditure limitation to complete the acquisition transactions requested in the FY 2008 NOAA grant proposal. The motion carried with all in favor.

#### Marine Snail Invasion Project

In October of 2007 SSNERR staff submitted a pre-proposal to NOAA's Aquatic Invasive Species program. In mid February 2008, South Slough's proposal entitled "Monitoring and Detection Protocol for *Assiminea sp*" was selected for support by NOAA's Aquatic Invasives Species Program (AISP). The \$100,000 research proposal is focused on a recent invasion of the Coos estuary by a non-native snail originating from Asia. The project will test the feasibility of establishing a coordinated, multi-organization early detection program for non-indigenous marine species in Oregon estuaries. To accomplish this, the project will establish and test a cooperative agreement between NOAA, the South Slough National Estuarine Research Reserve and the Confederated Tribes of the Coos, Lower Umpqua and Siuslaw Indians, one of the three federally recognized Indian tribes on the Oregon Coast.

The project will include field surveys in the Coos estuary to determine the extent and scope of the distribution of the non-native and cooccurring native brackish water snails throughout the Coos estuary. In addition, the project will also include laboratory counts of reproductive output to develop an estimate of the breeding population size for *Assiminea parasitologica*. Finally, the project will include early detection, presence/absence surveys for *Assiminea* spp. and *Myostella myosotis* in the nearby Umpqua and Siuslaw River estuaries.

Funding for the project will be routed through the Pacific States Marine Fisheries Commission (PSMFC), for which Mr. Stephen Phillips is the point of contact. South Slough's proposal has become part of a larger, non-competitive proposal submitted by the PSMFC on February 14. PSMFC will interface with NOAA's AISP.

The project is slated to begin on August 1, 2008. Robin Elledge and Steve Rumrill were acknowledged for their work in completing the proposal and Jeannette Holman and Pamela Konstantopoulos were thanked for getting the proposal through the approval process in Salem. Dr. Jim Carlton, a world authority on marine introduced species will be in Coos Bay in late May to conduct comprehensive surveys on non-native snails. SSNERR staff will assist him in the field. Dr. Carlton served on the South Slough NERR Management Commission in 1989 and 1990. He is currently based in Connecticut.

Chair Solliday asked if there was a motion to accept the staff recommendation. Commissioner Young moved to authorize staff to seek expenditure limitation for the Marine Snail Invasion project at the June 2008 meeting of the Legislative Emergency Board.

## Commissioner Hamel seconded the motion. The motion carried with all in favor.

#### **NOAA 312 Evaluation**

Mike Graybill said he was pleased to announce that the federal audit of the Reserve in July 2007 produced many favorable results. A team of NOAA personnel interviewed Reserve staff and conducted a programmatic audit, as well as meeting with other agencies associated with SSNERR and members of the public. No necessary actions were reported, but suggestions were made to increase the GIS capabilities of the Reserve and for management to invest in training for all staff to positively influence employee retention.

#### **Informational**

Chair Solliday brought some key elements of the recent Oregon Ethics Revisions to the attention of the Management Commission.

NOAA's Marine Protected Areas (MPA) Framework comment period was discussed. NOAA's call for comments extends until April 16.

Mike Graybill distributed copies of correspondence dated March 18, 2008 from 16 members of the US Congress directed to the Chairman and Ranking Member of the Subcommittee on Commerce, Justice, Science and Related Agencies, Committee on Appropriations urging full support of the NERR system. A request to keep funding for the Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET) separate from the NERRS budget was also included in the letter, as the President's proposal to incorporate the CICEET budget with the NERRS budget makes it appear that there is a dramatic increase in NERRS funding where there is none.

#### MANAGEMENT AND ADMINISTRATION

<u>Storm Damage Report</u>: Robin Elledge was thanked for leading the effort to seek reimbursement from FEMA for significant damage a December storm caused to the yurts and the Reserve's trail system.

<u>Proposed Coos Bay Dredging Project:</u> In response to a call for comments by the US Army Corps of Engineers, Reserve staff submitted a letter on behalf of the SSNERR Management Commission asking that the EIS give consideration to the management objectives of the Reserve regarding any proposed navigation improvements in the Coos Estuary.

<u>Agreement with the Confederated Tribes:</u> The agreement is under review and modification at the Office of the Attorney General.

<u>Relocation of Administrative Offices</u>: Governor Kulongoski has designated the proposed Charleston Coastal and Ocean Center as an Oregon Solutions Project. In addition, the Governor has asked Senator Verger and Representative Roblan to serve as co-conveners of the effort.

<u>IT Update:</u> Good progress was reported on the Chief Technologist's efforts to install and implement a wireless network on the Reserve, as well as updating SSNERR's desktop computing environment.

#### STAFF PROGRAM UPDATES

These were included in the briefing packet sent to the Commission.

#### **PRESENTATION**

Dr. Steve Rumrill gave an informational presentation on the Decline of Mud Shrimp (*Upogebia pugettensis*) in Oregon Estuaries.

#### **ADJOURNMENT**

Chair Solliday adjourned the meeting at 4:30 p.m.

#### **NEW BUSINESS**

#### SUBJECT

Acquisition of property to be added to the administrative boundaries of the Reserve.

#### **ISSUE**

Staff are working with two sellers who own tracts adjacent to the SSNERR boundary in the NW portion of the Reserve. In November 2007, the Commission authorized staff to work toward the possible purchase of a 1.6 parcel on Seven Devils road and a 2.4 acre parcel on Salal Lane. The owner of the 1.6 acre parcel on Seven Devils Road recently also listed a .75 acre parcel adjacent to the 1.6 acre parcel. The staff seeks input from the Commission to determine if the Reserve should also consider purchasing the .75 acre parcel as well as the 1.6 acre parcel.

#### **BACKGROUND**

At the 121st regular meeting (Nov 07), the Commission authorized the staff to negotiate toward the purchase of two parcels that adjoin the administrative boundary of the Reserve in the NW region of the Reserve. The staff has secured funding from NOAA to support a portion of the acquisition costs and is scheduled to seek legislative expenditure limitation to expend NOAA funds and funds from the Gustafson Estate in September of 2008. In addition, the purchases will also have to be approved by the Oregon State Land Board. We expect to request this approval at the October 2008 Land Board meeting. The following is a progress report on actions leading to the purchase of the parcels approved in November 2007 and a request for Commission action on another small parcel that has recently come on the market:

#### North Creek Headwaters Parcel

Staff is negotiating for the purchase of a 2.4 acre parcel that adjoins the Reserve boundary along Salal Lane in the Northwestern portion of the Reserve. The seller wishes to enter into a Life Estate agreement with the Reserve. Such an agreement would allow the seller to reside on the property for the remainder of his/her life, at which time the property would be transferred in its entirety to the Reserve. The staff recently completed a Life Estate Valuation that establishes the value of the property, subject to the life estate. The staff is currently working with the Oregon Department of Justice to review the issues linked to the State or Oregon entering into this type of agreement, and is currently drafting

a Purchase and Sale Agreement that can be presented for the seller's consideration.

#### Hidden Creek Headwaters Parcels

The Commission also authorized staff to negotiate toward the purchase of a 1.6 acre parcel located on Seven Devils Road just south of the Interpretive Center. The property currently hosts an uninhabitable mobile home and a shop. An appraisal of this property was completed in late May. At the owner's request, this appraisal estimated the market value as "bare land" with the shop in place, but the mobile home removed. We are currently finalizing a Purchase and Sale Agreement drafted for this acquisition by Paul Weddle, Senior Assistant Attorney General with the Oregon Department of Justice (DOJ), and will present it to the realtor handling these properties on July 8th.

In late spring 2008, the seller of the 1.6 acre parcel on Seven Devils Road listed an additional .75 acre property adjacent to the 1.6 acre parcel. This recently listed parcel includes a 20-25 year old single family dwelling listed in average condition. The Coos County assessor's office lists the market vale of the .75 acre property at \$179,000.

The staff seeks Commission input to determine if the purchase of the .75 acre parcel should be incorporated into the negotiations for the 1.6 acre parcel. Should the Commission elect to proceed with the purchase of the .75 acre tract, additional funding will be necessary. No additional NOAA funding is available to support the purchase. The Commission could increase the amount of funding requested from the Gustafson Estate to complete the purchase of the .75 acre parcel.

#### STAFF RECOMMENDATION

The Commission should authorize staff to negotiate for the purchase of the .75 acre parcel.

The Commission should increase the pending request to expend funds from the Gustafson estate in an amount sufficient to cover the additional costs associated with the purchase of the .75 acre parcel.

#### Subject

2009-2011 biennial budget for the SSNERR

#### **Issue**

This is a progress report on the state biennial budget development process for the South Slough NERR.

#### Background

All state agencies in Oregon are in the process of preparing agency requests for the July 2009 through June 2011 budget period. The SSNERR Management Commission has previously approved a list of budget development priorities. This is a progress report on the budget development process.

In May 2008, SSNERR staff worked with the Finance and Administrative staff at the Department of State Lands to develop a base budget and a series of Program Option Packages for the South Slough NERR Program. If implemented key elements of the Program Option Packages will:

- Make the current limited-duration information systems position permanent.
- Retain seven grant- and federally funded limited-duration positions.
- Add two half-time, seasonal (six month) interpretive center positions, and one half-time, seasonal ranger aide;
- Provide \$20,000 for interpretive center building maintenance.

In addition to providing program enhancement concepts, the budget development process also required SSNERR staff to develop a \$310,000 budget reduction scenario. The budget reduction scenario was forwarded to the Department of State Lands in late June. The reduction scenario includes thee elements: 1. reduce the work week of state funded employees by 8 hours; 2. reduce the training, professional development, in-state and out-of-state travel budget by 80%; and 3. reduce other Services and Supplies budget by 10%.

Before DSL's budget is adopted it will be subject to several additional tiers of review. The Department of State Land's budget request will be forwarded to the Department of Administrative Services this fall. The Governor's office will issue the Governor's Recommended Budget in late 2008 and the Legislature will evaluate and adopt a Legislatively Adopted Budget in the spring of 2009.

## **Staff Recommendation**

This is an update. No Commission action is requested.

#### **NEW BUSINESS**

#### SOUTH SLOUGH NERR Stewardship Forest Plan

#### SUBJECT

Update on progress towards the creation of a Forestry Management Plan for the South Slough NERR

#### **ISSUE**

The staff have begun to prepare a management plan for forested habitats of the South Slough NERR. We seek Commission input on and policy guidance related to the draft goals and objectives of the plan.

#### **BACKGROUND**

A \$48,000 technical assistance grant from the Oregon Watershed Enhancement Board administered in partnership with the Friends of South Slough, Inc. has enabled the Reserve to hire Jake Robinson as SSNERR's Forest Science Coordinator (NRS-2 for 11 months). Jake has a background in forest management, stewardship, and ecology. Prior to this assignment, he managed workforce operations for the Lomakatsi Restoration Project in the Ashland area, and operated his own forest management consulting business.

Since his arrival in April, Jake has been meeting landowners and managers throughout the South Slough watershed and has obtained permission to access remote areas of the Reserve through private lands. As part of these introductory meetings, he has also solicited advice on the goals and trajectory of our forest management program.

A five member, project-specific advisory group has been created to assist the Reserve staff with the creation of a forest management plan. The advisory group members are Frank Price (BLM Forest Ecologist), Bob Laport (Coos Co. Forester), Chris Schumacher (BLM Forester), Norma Kline (ODF Forest Ecologist) and Chris Sheridan (BLM Forest Ecologist). These individuals have many years of expertise and have expressed a great interest in supporting the Commission's effort to develop a forest management plan for the Reserve. A draft outline for the forest management plan has been created as well as a survey protocol for the upland forests. An advisory group meeting (the first of several) is planned for the second half of July 08 to review/analyze all work to date.

The draft goals and objectives of the forest plan are presented below:

#### Draft

## **SSNERR Forest Management Plan: Goals and Objectives**

#### **Goal:**

Improve overall forest health as per ORS 273.553 and OAR 142-010-0020 (11)

#### **Objectives:**

- 1. Guide forest stands in the Reserve toward pre-euroamerican contact conditions:
  - Recognize the dynamic nature of forest ecosystems and historic native influences
  - Use Cummins Creek as a reference site that experienced a stand replacing fire in 1850
- 2. Reduce fuels thereby reducing the chance of a single Reserve-wide catastrophic fire:
- 3. Provide opportunities to study forest issues and different silviculture treatments:
  - Incorporate principles of adaptive management; learn from results
  - Incorporate a long term monitoring program for forest habitats
- 4. Improve habitat for all native faunal species, including those no longer present:
- 5. Reestablish and sustain the historic diversity of native floral species:
- 6. Provide some revenue through sale of the by-products of forest restoration activities:
  - Only as by-products of ecologically focused management treatments
  - Explore opportunities for new/unique modes of utilization

#### STAFF RECOMMENDATION

We seek the Commission's comments on and endorsement of the principles embodied in the draft goals and objectives of the SSNERR Forest Management Plan.

In particular, we seek Commission input on two activities likely to be associated with implementing the forest management plan: 1) the potential of selling both timber and small diameter wood products produced as by-products of management activities; and 2) the recommissioning of roads within SSNERR to support forest management activities.

#### Administration staff report

**New Staff** 

<u>Jake Robinson</u> joined the South Slough staff on April 14<sup>th</sup> as the Forest Science Coordinator. He is working to develop a management plan for the forested portions of the watershed. His limited duration grant supported assignment should be complete in spring of 2009.

Hans Klausner joined the South Slough staff on April 26th<sup>th</sup> as the Stewardship Program Coordinator. In his first few weeks of work he has assisted with realty transactions, native oyster restoration, permit compliance monitoring and has been busy leading the Youth Conservation Corps crew on a variety of on the ground stewardship projects. Hans' previous work included stewardship projects in various parts of Alaska. His grant supported position continues through the 2007-2009 biennium.

#### Oregon Youth Conservation Corps Crew

In partnership with the SWOYA Boys and Girls Club, SSNERR is hosting another Oregon Youth Conservation Corps crew this summer. The OYCC crew began work on June 23<sup>rd</sup> and will wrap things up on August 7<sup>th</sup>. They will work with a number of Reserve staff members on stewardship, research, education and maintenance projects.

Kevin Cellura, a science teacher at Marshfield High School, is studying the potential differences in survival, growth, and susceptibility to predation and overgrowth competition between populations of oysters from Coos Bay and Willapa Bay. Kevin's 8 week assignment is supported by a grant from the Murdock Charitable Trust. He hopes to determine whether the local populations of native oysters have become better adapted to the ecological conditions in the Coos estuary.

<u>Rheannon Arvidson</u> is a Portland Community College student who will be working at South Slough through the summer. She is investigating water flow and turbulence created by clusters of oysters.

Jill Alexander began work at the SSNERR / Estuarine and Coastal Science Laboratory on 30 June 2008 as a research intern. Jill is an undergraduate student at Oregon State University. She is working with water quality and nutrient data to develop a series of maps designed to illustrate seasonal and tidal changes in the characteristics of water in the South Slough estuary.

Yvonne Gekas began working at the front desk of the Interpretive Center on 8 July. Yvonne is participating in the Experience Works Program.

Her assignment at South Slough brings 20 hours of additional assistance each week. Her primary assignment is to help with the visitor services program at the Interpretive Center.

<u>Melissa Barr</u> joined the seasonal staff of the Friends of South Slough on June 1<sup>st</sup>. Melissa helps with bookstore sales and visitor services on Fridays, and weekends.

#### Agreement with Confederated Tribes

In July 2008 the Tribal Council of the Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians and the South Slough NERR formally signed a cooperative agreement. The draft agreement has been in development for over a year. Approval of the agreement is an important milestone for the Reserve. The staff is presently working on the first task order that will be covered by the agreement. The task order will outline how the Confederated Tribes will work with the Reserve on a project to characterize the distribution and breeding status of an invasive non-native intertidal snail that was recently detected in the Coos Estuary.

#### Agreement with Coos County for Wi Fi Tower

On July 9th the Coos County Board of Commissioners officially granted permission for the South Slough NERR to construct and operate a telecommunications tower at the Joe Ney Slough solid waste disposal facility. The agreement is a key element in the wireless telecommunications system being developed at the Reserve. SSNERR Chief Technologist Tom Elledge and SSNERR administrative staff is presently working to issue contracts to construct the tower.

## Revenues & Expenditures by Appropriation

2007-09 Biennium Through May 2008

## Appropriation: 32007 SSNER O/F

	Biennium						Actual		<u>-</u>				rojection	Estimated	Available	Projection	07-09
Devenue	to Date	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	FY 2008	FY 2009	Total 07-09	Budget
Revenue																	
REVENUES																	
975 OTHER REVENUE	53,342	0	0	0	38,545	7,296	0	0	0	0	0	7,500	0	53,342	-53,342	0	0
995 FEDERAL FUNDS REVENUE	37,346	0	0	0	0	37,346	0	0	0	0	0	0	0	37,346	-37,346	0	0
Total REVENUES	90,688	0	0	0	38,545	44,642	0	0	0	0	0	7,500	0	90,688	-90,688	0	0
TRANSFER IN																	
1010 TRANSFER IN FROM OTHER	707,689	0	200,000	0	200,000	100,000	0	0	0	207,689	0	0	0	707,689	-707,689	0	0
1248 TRANSFER IN FROM MILITAR	18,002	0	0	0	0	0	0	0	0	17,745	257	0	0	18,002	-18,002	0	0
Total TRANSFER IN	725,691	0	200,000	0	200,000	100,000	0	0	0	225,434	257	0	0	725,691	-725,691	0	0
Total Revenue	816,379	0	200,000	0	238,545	144,642	0	0	0	225,434	257	7,500	0	816,379	-816,379	0	0
TRANSFER OUT		····			·											<b></b>	
TRANSFER OUT																	
2629 TRANSFER OUT TO FOREST	6,580	0	0	0	0	0	0	0	0	6,580	0	0	0	6,580	-6,580	0	0
Total TRANSFER OUT	6,580	0	0	0	0	0	0	0	0	6,580	0	0	0	6,580	-6,580	0	0
PERSONAL SERVICES																	
3110 CLASS/UNCLASS SALARY &	369,656	25,882	25,882	36,543	56,196	33,732	29,852	46,746	29,853	29,924	23,754	31,293	36,665	406,321	363,601	769,922	769,922
3160 TEMPORARY APPOINTMENT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46,447	46,447	46,447
3170 OVERTIME PAYMENTS	2,062	0	1,782	0	0	281	0	0	0	0	0	0	0	2,062	-2,062	0	0
3190 ALL OTHER DIFFERENTIAL	1,704	152	152	152	170	157	157	157	157	157	157	137	157	1,861	-1,861	0	0
3210 ERB ASSESSMENT	121	7	7	12	19	11	9	18	9	10	7	10	2	123	172	294	294
3220 PUBLIC EMPLOYES' RETIRE	43,996	2,221	2,619	4,515	6,610	3,881	3,778	6,123	3,781	3,787	3,014	3,666	864	44,860	53,073	97,933	97,933
3221 PENSION BOND CONTRIBUTI	21,807	1,203	1,377	2,275	3,489	2,046	1,861	2,837	1,787	1,790	1,411	1,732	303	22,110	16,695	38,805	38,805
3230 SOCIAL SECURITY TAX	28,563	1,999	2,128	2,805	4,308	2,612	2,294	3,591	2,296	2,300	1,828	2,403	527	29,090	33,409	62,499	62,499
3240 UNEMPLOYMENT ASSESSME	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,274	5,274	5,274
3250 WORKERS' COMPENSATION	187	14	14	18	29	16	11	26	14	15	12	17	4	191	314	505	505
3260 MASS TRANSIT	35	0	0	11	24	0	0	0	0	0	0	0	0	35	-34	1	1

## Revenues & Expenditures by Appropriation

### 2007-09 Biennium Through May 2008

## Appropriation: 32007 SSNER O/F

	Biennium						Actual					P	rojection	Estimated	Available	Projection	07-09
	to Date	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	FY 2008	FY 2009	Total 07-09	Budget
PERSONAL SERVICES																	
3270 FLEXIBLE BENEFITS	97,396	6,575	6,575	9,458	14,678	8,387	8,204	12,736	8,204	8,204	6,505	7,870	1,650	99,046	87,508	186,554	186,554
Total PERSONAL SERVICES	565,526	38,053	40,536	55,788	85,524	51,122	46,167	72,234	46,100	46,187	36,688	47,128	40,172	605,697	602,537	1,208,234	1,208,234
SERVICES AND SUPPLIES																	
4100 INSTATE TRAVEL	7,043	251	163	0	784	265	1,448	699	304	823	868	1,440	1,731	8,774	12,305	21,079	21,079
4125 OUT-OF-STATE TRAVEL	980	0	0	0	0	452	0	0	0	0	528	0	0	980	5,853	6,833	6,833
4150 EMPLOYEE TRAINING	7,507	321	327	0	2,740	445	535	550	579	186	1,374	450	445	7,952	8,072	16,024	16,024
4175 OFFICE EXPENSES	6,015	688	451	373	513	633	441	383	36	153	1,565	780	6,047	12,062	11,397	23,459	23,459
4200 TELECOMM/TECH SVC AND	\$ 6,355	304	10	333	507	389	1,269	1,551	317	330	986	358	547	6,902	9,780	16,682	16,682
4225 STATE GOVERNMENT SERV	I 0	0	0	0	0	0	0	0	0	0	0	0	0	0	19,423	19,423	19,423
4250 DATA PROCESSING	2,653	0	2,624	0	0	0	0	0	0	0	0	30	0	2,653	-1,153	1,500	1,500
4275 PUBLICITY & PUBLICATIONS	182	0	0	0	59	0	0	0	0	93	30	0	0	182	282	464	464
4300 PROFESSIONAL SERVICES	3,895	58	58	0	116	58	0	1,107	1,131	79	451	837	230	4,125	168,302	172,427	172,427
4315 IT PROFESSIONAL SERVICE	\$ 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
4325 ATTORNEY GENERAL LEGAI	8,665	0	0	0	0	0	511	2,321	101	0	5,632	101	821	9,486	-5,580	3,906	3,906
4375 EMPLOYEE RECRUITMENT A	۸ 0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,813	2,813	2,813
4400 DUES AND SUBSCRIPTIONS	25	0	0	25	0	0	0	0	0	0	0	0	0	25	-13	12	12
4425 FACILITIES RENT & TAXES	170	0	0	0	50	0	60	120	0	0	-60	0	0	170	-130	40	40
4450 FUELS AND UTILITIES	4,333	98	0	172	236	64	843	635	855	270	696	464	600	4,934	2,419	7,353	7,353
4475 FACILITIES MAINTENANCE	2,118	137	101	221	147	0	344	378	401	64	215	110	503	2,621	3,526	6,147	6,147
4650 OTHER SERVICES AND SUP	F 8,695	817	103	922	156	220	1,562	285	955	371	1,374	1,930	908	9,603	17,946	27,549	27,549
4700 EXPENDABLE PROPERTY \$2	. 81	0	0	0	0	0	0	0	0	0	81	0	192	272	6,303	6,575	6,575
4715 IT EXPENDABLE PROPERTY	9,020	1,223	0	1,114	144	0	1,598	26	367	0	2,922	1,627	0	9,020	-5,670	3,350	3,350
Total SERVICES AND SUPPLIES	67,737	3,897	3,836	3,158	5,451	2,527	8,611	8,056	5,046	2,368	16,661	8,127	12,025	79,762	255,874	335,636	335,636
CAPITAL OUTLAY																	
5200 TECHNICAL EQUIPMENT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45,000	45,000	45,000
5600 DATA PROCESSING HARDW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5650 LAND AND IMPROVEMENTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	250,000	250,000	250,000
5700 BUILDINGS AND STRUCTUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

# Revenues & Expenditures by Appropriation 2007-09 Biennium Through May 2008

## Appropriation: 32007 SSNER O/F

	Bienniu								Actual								Estimated			07-09
	to Date	Э	July	Aug	Se	pt	Oct	Nov	Dec	Ja	ın	Feb	March	April	May	June	FY 2008	FY 2009	Total 07-09	Budget
CAPITAL OUTLAY																				
5900 OTHER CAPITAL OUTLAY	207,6	89	0	0	·	0	0	(	0	0	0	0	1,000	0	206,689	9 0	207,689	-207,689	0	0
Total CAPITAL OUTLAY	207,6	89	0	0		0	0	(	0	0	0	0	1,000	0	206,689	9 0	207,689	87,311	295,000	295,000
Total Expense	847,5	32	41,950	44,372	58	8,946	90,975	53,649	54,77	7 8	0,289	51,146	56,134	53,349	261,944	52,196	899,728	939,142	1,838,870	1,838,870
Net SSNER O/F	-31,1	53	-41,950	155,628	-58	8,946	147,571	90,993	-54,77	7 -80	0,289	-51,146	169,300	-53,092	-254,444	4 -43,006	-83,349	-1,755,521	-1,838,870	-1,838,870

## Revenues & Expenditures by Appropriation

2007-09 Biennium Through May 2008

## Appropriation: 32017 SSNER GUSTAFSON TRUST ACCOUNT -- N/B

	Biennium						Actual					F	rojection	Estimated	Available	Projection	07-09
	to Date	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	FY 2008	FY 2009	Total 07-09	Budget
Revenue																	
REVENUES																	
210 OTHER NONBUSINESS LICE	N 0	0	-10,818	0	0	0	0	0	0	0	0	10,818	0	0	0	0	0
605 INTEREST AND INVESTMENT	T 94,056	0	21,769	11,090	21,786	11,041	9,739	9,509	125	6,518	7,444	-4,964	0	94,056	-94,056	0	0
Total REVENUES	94,056	0	10,952	11,090	21,786	11,041	9,739	9,509	125	6,518	7,444	5,854	0	94,056	-94,056	0	0
Total Revenue	94,056	0	10,952	11,090	21,786	11,041	9,739	9,509	125	6,518	7,444	5,854	0	94,056	-94,056	0	0
Expense																	
TRANSFER OUT																	
2010 TRANSFER OUT TO OTHER	207,689	0	0	0	0	0	0	0	0	207,689	0	0	0	207,689	-207,689	0	0
Total TRANSFER OUT	207,689	0	0	0	0	0	0	0	0	207,689	0	0	0	207,689		·r	0
SERVICES AND SUPPLIES																	
4175 OFFICE EXPENSES	-1	0	0	0	0	0	0	0	0	-1	0	0	0	-1	1	0	0
4300 PROFESSIONAL SERVICES	450	0	0	0	0	0	0	0	0	450	0	0	0	<b>4</b> 50	-450	0	0
Total SERVICES AND SUPPLIES	449	0	0	0	0	0	0	0	0	449	0	0	0	449	-449	0	0
Total Expense	208,138	0	0	0	0	0	0	0	0	208,138	0	0	0	208,138	-208,138	0	0
Net SSNER GUSTAFSON TRUST ACCOUNT N/B	-114,082	0	10,952	11,090	21,786	11,041	9,739	9,509	125	-201,621	7,444	5,854	0	-114,082	114,082	0	0

## Revenues & Expenditures by Appropriation

2007-09 Biennium Through May 2008

## Appropriation: 62007 SSNER F/F

	Biennium						Actual		<u></u>					Estimated		Projection	07-09
Revenue	to Date	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	FY 2008	FY 2009	Total 07-09	Budget
Revenue																	
REVENUES																	
995 FEDERAL FUNDS REVENUE	527,595	0	0	0	0	0	25,803	0	500,322	0	0	1,470	0	527,595	-527,595	0	0
Total REVENUES	527,595	0	0	0	0	0	25,803	0	500,322	0	0	1,470	0	527,595	-527,595	0	0
Total Revenue	527,595	0	0	0	0	0	25,803	0	500,322	0	0	1,470	0	527,595	-527,595	0	0
Expense																	
PERSONAL SERVICES																	
3110 CLASS/UNCLASS SALARY &	253,153	28,772	30,262	21,075	6,117	-34,277	83,792	7,864	24,758	24,360	31,041	29,389	25,396	278,549	446,521	725,070	725,070
3160 TEMPORARY APPOINTMENT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66,964	66,964	66,964
3170 OVERTIME PAYMENTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,816	2,816	2,816
3180 SHIFT DIFFERENTIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	8
3190 ALL OTHER DIFFERENTIAL	513	0	0	0	0	0	0	493	0	0	0	20	0	513	-513	0	0
3210 ERB ASSESSMENT	124	13	13	10	4	-14	38	3	12	15	17	14	4	128	208	336	336
3220 PUBLIC EMPLOYES' RETIRE	32,844	3,687	3,865	2,705	896	-4,333	10,879	1,067	3,327	3,277	3,987	3,488	1,402	34,246	58,271	92,517	92,517
3221 PENSION BOND CONTRIBUT	15,145	1,784	1,878	1,307	377	-2,127	5,197	459	1,473	1,449	1,798	1,550	491	15,636	-8,130	7,506	7,506
3230 SOCIAL SECURITY TAX	19,473	2,200	2,316	1,611	464	-2,623	6,409	644	1,893	1,863	2,373	2,324	854	20,327	40,479	60,806	60,806
3250 WORKERS' COMPENSATION	168	19	22	13	3	-25	55	6	17	16	22	20	7	175	405	580	580
3270 FLEXIBLE BENEFITS	81,287	9,250	9,250	6,644	1,694	-11,056	26,553	3,521	8,053	8,053	9,752	9,575	2,676	83,963	128,456	212,419	212,419
Total PERSONAL SERVICES	402,708	45,724	47,606	33,364	9,554	-54,455	132,922	14,057	39,532	39,032	48,990	46,380	30,830	433,538	735,484	1,169,022	1,169,022
SERVICES AND SUPPLIES																	
4100 INSTATE TRAVEL	1,336	0	0	202	0	135	627	0	0	653	-456	174	737	2,073	59,801	61,874	61,874
4125 OUT-OF-STATE TRAVEL	2,054	0	0	0	0	0	565	0	0	1,489	0	0	0	2,054	33,736	35,790	35,790
4150 EMPLOYEE TRAINING	9,442	1,089	285	2,629	779	-2,881	2,242	768	0	412	4,119	0	50	9,492	36,267	45,759	45,759
4175 OFFICE EXPENSES	7,657	1,841	408	964	741	-149	2,328	393	223	281	403	225	5,951	13,608	28,111		41,719
4200 TELECOMM/TECH SVC AND	3,473	216	0	357	225	-94	1,276	832	100	131	431	0	135	3,609	38,596	42,205	42,205
4225 STATE GOVERNMENT SERVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,365	<b>.</b>	9,365
4250 DATA PROCESSING	0	0	0	0	0	0	0	0	0	0	0	0				10,500	10,500

## Revenues & Expenditures by Appropriation

### 2007-09 Biennium Through May 2008

## Appropriation: 62007 SSNER F/F

	Biennium						Actual					F	Projection	Estimated	Available	Projection	07-09
	to Date	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	FY 2008	FY 2009	Total 07-09	Budget
SERVICES AND SUPPLIES																	
4275 PUBLICITY & PUBLICATIONS	89	0	0	0	0	0	89	0	0	0	0	0	80	169	1,208	1,376	1,376
4300 PROFESSIONAL SERVICES	750	0	0	0	0	0	250	0	0	0	0	500	4,576	5,326	737,578	742,904	742,904
4315 IT PROFESSIONAL SERVICE	175	0	0	0	0	0	0	0	0	0	0	175	0	175	-175	0	0
4375 EMPLOYEE RECRUITMENT A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,993	5,993	5,993
4400 DUES AND SUBSCRIPTIONS	130	0	0	0	0	0	130	0	0	0	0	0	0	130	639	769	769
4425 FACILITIES RENT & TAXES	80	0	0	30	50	0	0	0	0	0	0	0	0	80	-80	0	0
4450 FUELS AND UTILITIES	3,641	115	0	226	138	-10	929	450	668	100	361	665	462	4,102	7,636	11,738	11,738
4475 FACILITIES MAINTENANCE	2,823	20	0	43	0	-20	148	177	149	0	1,698	608	20	2,843	3,919	6,762	6,762
4575 AGENCY PROGRAM RELATE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,038	5,038	5,038
4650 OTHER SERVICES AND SUPI		450	0	3,339	2,767	98,294	-93,720	561	589	-1,250	1,599	602	460	13,693	5,908	19,601	19,601
4700 EXPENDABLE PROPERTY \$2	558	0	0	0	0	0	0	1,519	0	-1,519	558	0	135	693	15,094	15,787	15,787
4715 IT EXPENDABLE PROPERTY	27,883	0	0	0	0	0	2,220	10,167	524	3,386	9,845	1,741	0	27,883	-19,533	8,350	8,350
Total SERVICES AND SUPPLIES	73,324	3,731	693	7,789	4,700	95,276	-82,916	14,867	2,252	3,683	18,558	4,690	12,607	85,930	979,600	1,065,530	1,065,530
CAPITAL OUTLAY																	
5100 OFFICE FURNITURE AND FIX	308	0	0	0	0	0	0	308	0	0	0	0	0	308	-308	0	0
5200 TECHNICAL EQUIPMENT	3,544	0	0	0	0	0	0	3,544	0	0	0	0	0	3,544	362,956	366,500	366,500
5600 DATA PROCESSING HARDW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5700 BUILDINGS AND STRUCTURE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total CAPITAL OUTLAY	3,852	0	0	0	0	0	0	3,852	0	0	0	0	0	3,852	362,648	366,500	366,500
Total Expense	479,883	49,456	48,299	41,153	14,254	40,821	50,006	32,776	41,785	42,716	67,547	51,070	43,437	523,320	2,077,732	2,601,052	2,601,052
Net SSNER F/F	47,712	-49,456	-48,299	-41,153	-14,254	-40,821	-24,203	-32,776	458,537	-42,716	-67,547	-49,600	-34,624	4,275	-2,605,327	-2,601,052	-2,601,052

# Oregon Department of State Lands Revenues & Expenditures by Program

2007-09 Biennium Through May 2008

FY 2008				2000	O SOUTH	H SLOU	GH NATI	ONAL E	ST RES	EARCH	RESER						
	Biennium to Date	July	Aug	Sept	Oct	Nov	Actual Dec	Jan	Feb	March	April	May	Projection June	Estimated FY 2008	Available FY 2009	Projection Total 07-09	07-09 Budget
Revenue																	
REVENUES																	
975 OTHER REVENUE	53,342	0	0	0	38,545	7,296	0	0	0	0	0	7,500	0	53,342	-53,342	0	(
995 FEDERAL FUNDS REVENUE	564,941	0	0	0	0	37,346	25,803	0	500,322	0	0	1,470	0	564,941	-564,941	0	(
Total REVENUES	618,283	0	0	0	38,545	44,642	25,803	0	500,322	0	0	8,970	0	618,283	-618,283	0	(
TRANSFER IN																	
1010 TRANSFER IN FROM OTHER	707,689	0	200,000	0	200,000	100,000	0	0	0	207,689	0	0	0	707,689	-707,689	0	(
1248 TRANSFER IN FROM MILITAR	18,002	0	0	0	0	0	0	0	0	17,745	257	0	0	18,002	-18,002	0	(
Total TRANSFER IN	725,691	0	200,000	0	200,000	100,000	0	0	0	225,434	257	0	0	725,691	-725,691	0	(
Total Revenue	1,343,974	0	200,000	0	238,545	144,642	25,803	0	500,322	225,434	257	8,970	0	1,343,974	-1,343,974	0	0
Expense TRANSFER OUT	-,															· <b>r</b>	
2629 TRANSFER OUT TO FOREST	6,580	0	0	0	0	0	0	0	0	6,580	0	0	0	6,580	-6,580	0	C
Total TRANSFER OUT	6,580	0	0	0	0	0	0	0	0	6,580	0	0	0	6,580	-6,580	0	С
PERSONAL SERVICES																	
3110 CLASS/UNCLASS SALARY &	622,809	54,654	56,144	57,618	62,313	-544	113,644	54,610	54,610	54,284	54,795	60,682	62,061	684,870	810,122	1,494,992	1,494,992
3160 TEMPORARY APPOINTMENT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	113,411	113,411	113,411
3170 OVERTIME PAYMENTS	2,062	0	1,782	0	0	281	0	0	0	0	0	0	0	2,062	754	2,816	2,816
3180 SHIFT DIFFERENTIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	8
3190 ALL OTHER DIFFERENTIAL	2,217	152	152	152	170	157	157	650	157	157	157	157	157	2,374	-2,374	0	0
3210 ERB ASSESSMENT	245	20	20	23	23	-3	47	21	21	25	24	24	6	251	380	630	630
3220 PUBLIC EMPLOYES' RETIRE	76,839	5,909	6,484	7,219	7,506	-451	14,657	7,191	7,107	7,064	7,000	7,154	2,266	79,105	111,345	190,450	190,450
3221 PENSION BOND CONTRIBUT		2,987	3,256	3,582	3,866	-81	7,058	3,296	3,260	3,239	3,209	3,282	794	37,747	8,564	46,311	46,311
3230 SOCIAL SECURITY TAX	48,036	4,198	4,444	4,415	4,773	-11	8,703	4,235	4,189	4,162	4,201	4,727	1,381	49,417	73,888	<b>;</b>	123,305
3240 UNEMPLOYMENT ASSESSME	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,274	5,274	5,274

# Oregon Department of State Lands Revenues & Expenditures by Program

2007-09 Biennium Through May 2008

FY 2008				2000	SOUTH	SLOU	GH NATI	ONAL E	ST RES	EARCH	RESER						
	Biennium						Actual					F	Projection	Estimated	Available	Projection	07-09
	to Date	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	FY 2008	FY 2009	Total 07-09	Budget
PERSONAL SERVICES																	
3250 WORKERS' COMPENSATION	355	33	36	31	31	-9	67	32	32	31	34	37	11	366	719	1,085	1,08
3260 MASS TRANSIT	35	0	0	11	24	0	0	0	0	0	0	0	0	35	-34	1	
3270 FLEXIBLE BENEFITS	178,683	15,825	15,825	16,102	16,372	-2,669	34,757	16,257	16,257	16,257	16,257	17,445	4,326	183,009	215,964	398,973	398,97
Total PERSONAL SERVICES	968,233	83,777	88,142	89, 152	95,078	-3,332	179,089	86,291	85,632	85,219	85,678	93,508	71,002	1,039,235	1,338,021	2,377,256	2,377,25
SERVICES AND SUPPLIES																	
4100 INSTATE TRAVEL	8,379	251	163	202	784	400	2,075	699	304	1,476	412	1,614	2,468	10,847	72,106	82,953	82,95
4125 OUT-OF-STATE TRAVEL	3,034	0	0	0	0	452	565	0	0	1,489	528	0	0	3,034	39,589	42,623	42,62
4150 EMPLOYEE TRAINING	16,949	1,411	612	2,629	3,520	-2,436	2,777	1,318	579	598	5,492	450	495	17,444	44,339	61,783	61,78
4175 OFFICE EXPENSES	13,672	2,529	858	1,337	1,253	484	2,769	776	259	433	1,968	1,005	11,997	25,669	39,509	65,178	65,17
4200 TELECOMM/TECH SVC AND S	9,828	520	10	689	732	295	2,545	2,383	417	461	1,416	358	683	10,511	48,376	58,887	58,88
4225 STATE GOVERNMENT SERVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28,788	28,788	28,78
4250 DATA PROCESSING	2,653	0	2,624	0	0	0	0	0	0	0	0	30	0	2,653	9,347	12,000	12,00
4275 PUBLICITY & PUBLICATIONS	270	0	0	0	59	0	89	0	0	93	30	0	80	350	1,490	1,840	1,84
4300 PROFESSIONAL SERVICES	4,645	58	58	0	116	58	250	1,107	1,131	79	451	1,337	4,806	9,451	905,880	915,331	915,33
4315 IT PROFESSIONAL SERVICES	175	0	0	0	0	0	0	0	0	0	0	175	0	175	-175	0	1
4325 ATTORNEY GENERAL LEGAL	8,665	0	0	0	0	0	511	2,321	101	0	5,632	101	821	9,486	-5,580	3,906	3,90
4375 EMPLOYEE RECRUITMENT A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,806	8,806	8,80
4400 DUES AND SUBSCRIPTIONS	155	0	0	25	0	0	130	0	0	0	0	0	0	155	626	781	78
4425 FACILITIES RENT & TAXES	250	0	0	30	100	0	60	120	0	0	-60	0	0	250	-210	40	4
4450 FUELS AND UTILITIES	7,974	213	0	398	373	54	1,773	1,085	1,522	370	1,057	1,129	1,062	9,036	10,055	19,091	19,09
4475 FACILITIES MAINTENANCE	4,942	157	101	264	147	-20	492	555	550	64	1,913	718	523	5,465	7,444	12,909	12,90
4575 AGENCY PROGRAM RELATE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,038	5,038	5,03
4650 OTHER SERVICES AND SUPP	21,928	1,267	103	4,260	2,923	98,515	-92,158	847	1,544	-879	2,973	2,533	1,369	23,297	23,853	47,150	47,15
4700 EXPENDABLE PROPERTY \$2	639	0	0	0	0	0	0	1,519	0	-1,519	639	0	327	966	21,396	22,362	22,36
4715 IT EXPENDABLE PROPERTY	36,902	1,223	0	1,114	144	0	3,818	10,193	891	3,386	12,767	3,367	0	36,902	-25,202	11,700	11,70
Total SERVICES AND SUPPLIES	141,061	7,628	4,529	10,948	10,150	97,803	-74,305	22,922	7,299	6,051	35,218	12,817	24,631	165,692	1,235,474	1,401,166	1,401,16
CAPITAL OUTLAY																	
5100 OFFICE FURNITURE AND FIX	308	0	0	0	0	0	0	308	0	0	0	0	0	308	-308	0	(

## Revenues & Expenditures by Program

2007-09 Biennium Through May 2008

FY 2008				2000	SOUTH	SLOUG	SH NATI	ONAL E	ST RES	EARCH	RESER						
	Biennium						Actual						Projection			Projection	07-09
	to Date	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	FY 2008	FY 2009	Total 07-09	Budget
CAPITAL OUTLAY																	
5200 TECHNICAL EQUIPMENT	3,544	0	0	0	0	0	0	3,544	0	0	0	0	0	3,544	407,956	411,500	411,500
5600 DATA PROCESSING HARDW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(
5650 LAND AND IMPROVEMENTS		0	0	0	0	0	0	0	0	0	0	0	0	0	250,000	250,000	250,000
5700 BUILDINGS AND STRUCTUR	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(
5900 OTHER CAPITAL OUTLAY	207,689	0	0	0	0	0	0	0	0	1,000	0	206,689	0	207,689	-207,689	0	(
Total CAPITAL OUTLAY	211,541	0	0	0	0	0	0	3,852	0	1,000	0	206,689	0	211,541	449,959	661,500	661,500
Total Expense	1,327,414	91,406	92,671	100,099	105,229	94,471	104,784	113,065	92,931	98,850	120,896	313,014	95,633	1,423,048	3,016,874	4,439,922	4,439,922
Net SOUTH SLOUGH NATIONAL	16,559	-91,406	107,329	-100,099	133,317	50,172	-78,980	-113,065	407,391	126,584	-120,639	-304,044	-77,630	-79,074	-4,360,848	-4,439,922	-4,439,922
EST RESEARCH RESER	1	- , ,	- /	1 1	1		-,,	-,		.,	.,,	7			,- ,-,-		,

## Oregon Department of State Lands Revenues & Expenditures by Program/Appropriation 2007-09 Biennium Through May 2008

### 1100 TRUST FUNDS

FY 2008				3	2017 SS	NER G	<i>JSTAFS</i> (	ON TRU	ST ACC	OUNT	N/B						
	Biennium to Date	July	Aug	Sept	Oct	Nov	Actual Dec	Jan	Feb	March	April	May	Projection June	Estimated FY 2008		Projection Total 07-09	07-09 Budget
Revenue																	
REVENUES																	
210 OTHER NONBUSINESS LICE	0	0	-10,818	0	0	0	0	0	0	0	0	10,818	0	0	0	0	
605 INTEREST AND INVESTMENT	94,056	0	21,769	11,090	21,786	11,041	9,739	9,509	125	6,518	7,444	-4,964	0	94,056	-94,056	0	
Total REVENUES	94,056	0	10,952	11,090	21,786	11,041	9,739	9,509	125	6,518	7,444	5,854	0	94,056	-94,056	0	
Total Revenue	94,056	0	10,952	11,090	21,786	11,041	9,739	9,509	125	6,518	7,444	5,854	0	94,056	-94,056	0	
Expense																	
TRANSFER OUT																	
2010 TRANSFER OUT TO OTHER	207,689	0	0	0	0	0	0	0	0	207,689	0	0	0	207,689	-207,689	0	
Total TRANSFER OUT	207,689	0	0	0	0	0	0	0	0	207,689	0	0	0	207,689	-207,689	0	
SERVICES AND SUPPLIES																	
4175 OFFICE EXPENSES	-1	0	0	0	0	0	0	0	0	-1	0	0	0	-1	1	0	
4300 PROFESSIONAL SERVICES	450	0	0	0	0	0	0	0	0	450	0	0	0	450	-450	0	
Total SERVICES AND SUPPLIES	449	0	0	0	0	0	0	0	0	449	0	0	0	449	-449	0	
Total Expense	208,138	0	0	0	0	0	0	0	0	208,138	0	0	0	208,138	-208,138	0	
Net SSNER GUSTAFSON TRUST ACCOUNT N/B	-114,082	0	10,952	11,090	21,786	11,041	9,739	9,509	125	-201,621	7,444	5,854	0	-114,082	114,082	0	

Revenues & Expenditures by Program/Appropriation 2007-09 Biennium Through May 2008

## 2000 SOUTH SLOUGH NATIONAL EST RESEARCH RESER

FY 2008							32007 S	SNER C	)/F								
	Biennium to Date	July	Aug	Sept	Oct	Nov	Actual Dec	Jan	Feb	March	April	F May	Projection June	Estimated FY 2008		Projection Total 07-09	07-09 Budget
Revenue	<u> </u>															<u>'</u> '	
REVENUES																	
975 OTHER REVENUE	53,342	0	0	0	38,545	7,296	0	0	0	0	0	7,500	0	53,342	-53,342	0	
995 FEDERAL FUNDS REVENUE	37,346	0	0	0	0	37,346	0	0	0	0	0	0	0	37,346	-37,346	0	
Total REVENUES	90,688	0	0	0	38,545	44,642	0	0	0	0	0	7,500	0	90,688	-90,688	0	
TRANSFER IN																	
1010 TRANSFER IN FROM OTHER	707,689	0	200,000	0	200,000	100,000	0	0	0	207,689	0	0	0	707,689	-707,689	0	
1248 TRANSFER IN FROM MILITAR	18,002	0	0	0	0	0	0	0	0	17,745	257	0	0	18,002	-18,002	0	
Total TRANSFER IN	725,691	0	200,000	0	200,000	100,000	0	0	0	225,434	257	0	0	725,691	-725,691	0	
Total Revenue	816,379	0	200,000	0	238,545	144,642	0	0	0	225,434	257	7,500	0	816,379	-816,379	0	
Expense TRANSFER OUT																	
2629 TRANSFER OUT TO FOREST	6,580	0	0	0	0	0	0	0	0	6,580	0	0	0	6,580	-6,580	0	
Total TRANSFER OUT	6,580	0	0	0	0	0	0	0	0	6,580	0	0	0	6,580	-6,580	0	
PERSONAL SERVICES																	
3110 CLASS/UNCLASS SALARY &	369,656	25,882	25,882	36,543	56,196	33,732	29,852	46,746	29,853	29,924	23,754	31,293	36,665	406,321	363,601	769,922	769,92
3160 TEMPORARY APPOINTMENT	0	0		0	0	0	0	0	0	0	0	0	0	0	46,447	46,447	46,44
3170 OVERTIME PAYMENTS	2,062	0	1,782	0	0	281	0	0	0		0	0	0	2,062	-2,062	0	
3190 ALL OTHER DIFFERENTIAL	1,704	152	152	152	170	157	157	157	157	157	157	137	157	1,861	-1,861	0	
3210 ERB ASSESSMENT	121	7	7	12	19	11	9	18	9	10	7	10	2	123	172	294	29
3220 PUBLIC EMPLOYES' RETIRE	43,996	2,221	2,619	4,515	6,610	3,881	3,778	6,123	3,781	3,787	3,014	3,666	864	44,860	53,073	97,933	97,93
3221 PENSION BOND CONTRIBUT	21,807	1,203	1,377	2,275	3,489	2,046	1,861	2,837	1,787	1,790	1,411	1,732	303	22,110	16,695	38,805	38,80
3230 SOCIAL SECURITY TAX	28,563	1,999	2,128	2,805	4,308	2,612	2,294	3,591	2,296	2,300	1,828	2,403	527	29,090	33,409	62,499	62,49

Oregon Department of State Lands
Revenues & Expenditures by Program/Appropriation 2007-09 Biennium Through May 2008

## 2000 SOUTH SLOUGH NATIONAL EST RESEARCH RESER

FY 2008 32007 SSNER O/F																	
	Biennium to Date	July	Aug	Sept	Oct	Nov	Actual Dec	Jan	Feb	March	April	F May	Projection June	Estimated FY 2008	Available FY 2009	Projection Total 07-09	07-09 Budget
PERSONAL SERVICES																	
3240 UNEMPLOYMENT ASSESSME	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,274	5,274	5,274
3250 WORKERS' COMPENSATION	187	14	14	18	29	16	11	26	14	15	12	17	4	191	314	505	505
3260 MASS TRANSIT	35	0	0	11	24	0	0	0	0	0	0	0	0	35	-34	1	1
3270 FLEXIBLE BENEFITS	97,396	6,575	6,575	9,458	14,678	8,387	8,204	12,736	8,204	8,204	6,505	7,870	1,650	99,046	87,508	186,554	186,554
Total PERSONAL SERVICES	565,526	38,053	40,536	55,788	85,524	51,122	46,167	72,234	46,100	46,187	36,688	47,128	40,172	605,697	602,537	1,208,234	1,208,234
SERVICES AND SUPPLIES																	
4100 INSTATE TRAVEL	7,043	251	163	0	784	265	1,448	699	304	823	868	1,440	1,731	8,774	12,305	21,079	21,079
4125 OUT-OF-STATE TRAVEL	980	0	0	0	0	452	0	0	0	0	528	0	0	980	5,853	6,833	6,833
4150 EMPLOYEE TRAINING	7,507	321	327	0	2,740	445	535	550	579	186	1,374	450	445	7,952	8,072	16,024	16,024
4175 OFFICE EXPENSES	6,015	688	451	373	513	633	441	383	36	153	1,565	780	6,047	12,062	11,397	23,459	23,459
4200 TELECOMM/TECH SVC AND S	6,355	304	10	333	507	389	1,269	1,551	317	330	986	358	547	6,902	9,780	16,682	16,682
4225 STATE GOVERNMENT SERVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19,423	19,423	19,423
4250 DATA PROCESSING	2,653	0	2,624	0	0	0	0	0	0	0	0	30	0	2,653	-1,153	1,500	1,500
4275 PUBLICITY & PUBLICATIONS	182	0	0	0	59	0	0	0	0	93	30	0	0	182	282	464	464
4300 PROFESSIONAL SERVICES	3,895	58	58	0	116	58	0	1,107	1,131	79	451	837	230	4,125	168,302	172,427	172,427
4315 IT PROFESSIONAL SERVICES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4325 ATTORNEY GENERAL LEGAL	8,665	0	0	0	0	0	511	2,321	101	0	5,632	101	821	9,486	-5,580	3,906	3,906
4375 EMPLOYEE RECRUITMENT A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,813	2,813	2,813
4400 DUES AND SUBSCRIPTIONS	25	0	0	25	0	0	0	0	0	0	0	0	0	25	-13	12	12
4425 FACILITIES RENT & TAXES	170	0	0	0	50	0	60	120	0	0	-60	0	0	170	-130	40	40
4450 FUELS AND UTILITIES	4,333	98	0	172	236	64	843	635	855	270	696	464	600	4,934	2,419	7,353	7,353
4475 FACILITIES MAINTENANCE	2,118	137	101	221	147	0	344	378	401	64	215	110	503	2,621	3,526	6,147	6,147
4650 OTHER SERVICES AND SUPP	8,695	817	103	922	156	220	1,562	285	955	371	1,374	1,930	908	9,603	17,946	27,549	27,549
4700 EXPENDABLE PROPERTY \$2	81	0	0	0	0	0	0	0	0	0	81	0	192	272	6,303	6,575	6,575
4715 IT EXPENDABLE PROPERTY	9,020	1,223	0	1,114	144	0	1,598	26	367	0	2,922	1,627	0	9,020	-5,670	3,350	3,350
Total SERVICES AND SUPPLIES	67,737	3,897	3,836	3,158	5,451	2,527	8,611	8,056	5,046	2,368	16,661	8,127	12,025	79,762	255,874	335,636	335,636

# **Oregon Department of State Lands**

Revenues & Expenditures by Program/Appropriation 2007-09 Biennium Through May 2008

# 2000 SOUTH SLOUGH NATIONAL EST RESEARCH RESER

FY 2008							32007 5	SSNER (	)/F									
	Biennium		·				Actual	Actual						Projection Estimated Available Projection				
	to Date	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	FY 2008	FY 2009		Budget	
CAPITAL OUTLAY																		
5200 TECHNICAL EQUIPMENT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45,000	45,000	45,000	
5600 DATA PROCESSING HARDW	1 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5650 LAND AND IMPROVEMENTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	250,000	250,000	250,000	
5700 BUILDINGS AND STRUCTURE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5900 OTHER CAPITAL OUTLAY	207,689	0	0	0	0	0	0	0	0	1,000	0	206,689	0	207,689	-207,689	0	0	
Total CAPITAL OUTLAY	207,689	0	0	0	0	0	0	0	0	1,000	0	206,689	0	207,689	87,311	295,000	295,000	
Total Expense	847,532	41,950	44,372	58,946	90,975	53,649	54,777	80,289	51,146	56,134	53,349	261,944	52,196	899,728	939,142	1,838,870	1,838,870	
Net SSNER O/F	-31,153	-41,950	155,628	-58,946	147,571	90,993	-54,777	-80,289	-51,146	169,300	-53,092	-254,444	-43,006	-83,349	-1,755,521	-1,838,870	-1,838,870	

# **Oregon Department of State Lands**

Revenues & Expenditures by Program/Appropriation 2007-09 Biennium Through May 2008

# 2000 SOUTH SLOUGH NATIONAL EST RESEARCH RESER

FY 2008							62007 S	SNER I	/F								
	Biennium to Date	July	Aug	Sept	Oct	Nov	Actual Dec	Jan	Feb	March	April	May	Projection June	Estimated FY 2008	Available FY 2009	Projection Total 07-09	07-09 Budget
Revenue	<u>'</u>										'			<del>-</del> "-		<u></u>	
REVENUES																	
995 FEDERAL FUNDS REVENUE	527,595	0	0	0	0	0	25,803	0	500,322	0	0	1,470	0	527,595	-527,595	0	(
Total REVENUES	527,595	0	0	0	0	0	25,803	0	500,322	0	0	1,470	0	527,595	-527,595	0	(
Total Revenue	527,595	0	0	0	0	0	25,803	0	500,322	0	0	1,470	0	527,595	-527,595	0	(
Expense																	
PERSONAL SERVICES																	
3110 CLASS/UNCLASS SALARY &	253,153	28,772	30,262	21,075	6,117	-34,277	83,792	7,864	24,758	24,360	31,041	29,389	25,396	278,549	446,521	725,070	725,070
3160 TEMPORARY APPOINTMENT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66,964	66,964	66,964
3170 OVERTIME PAYMENTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,816	2,816	2,816
3180 SHIFT DIFFERENTIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	8
3190 ALL OTHER DIFFERENTIAL	513	0	0	0	0	0	0	493	0	0	0	20	0	513	-513	0	(
3210 ERB ASSESSMENT	124	13	13	10	4	-14	38	3	12	15	17	14	4	128	208	336	336
3220 PUBLIC EMPLOYES' RETIRE	32,844	3,687	3,865	2,705	896	-4,333	10,879	1,067	3,327	3,277	3,987	3,488	1,402	34,246	58,271	92,517	92,517
3221 PENSION BOND CONTRIBUT	15,145	1,784	1,878	1,307	377	-2,127	5,197	459	1,473	1,449	1,798	1,550	491	15,636	-8,130	7,506	7,506
3230 SOCIAL SECURITY TAX	19,473	2,200	2,316	1,611	464	-2,623	6,409	644	1,893	1,863	2,373	2,324	854	20,327	40,479	60,806	60,806
3250 WORKERS' COMPENSATION	168	19	22	13	3	-25	55	6	17	16	22	20	7	175	405	580	580
3270 FLEXIBLE BENEFITS	81,287	9,250	9,250	6,644	1,694	-11,056	26,553	3,521	8,053	8,053	9,752	9,575	2,676	83,963	128,456	212,419	212,419
Total PERSONAL SERVICES	402,708	45,724	47,606	33,364	9,554	-54,455	132,922	14,057	39,532	39,032	48,990	46,380	30,830	433,538	735,484	1,169,022	1,169,022
SERVICES AND SUPPLIES																	
4100 INSTATE TRAVEL	1,336	0	0	202	0	135	627	0	0	653	-456	174	737	2,073	59,801	61,874	61,874
4125 OUT-OF-STATE TRAVEL	2,054	0	0	0	0	0	565	0	0	1,489	0	0	0	2,054	33,736	35,790	35,790
4150 EMPLOYEE TRAINING	9,442	1,089	285	2,629	779	-2,881	2,242	768	0		4,119	0	50	9,492	36,267	45,759	45,759
4175 OFFICE EXPENSES	7,657	1,841	408	964	741	-149	2,328	393	223	281	403	225	5,951	13,608	28,111	41,719	41,719
4200 TELECOMM/TECH SVC AND S	3,473	216	0	357	225	-94	1,276	832	100	131	431	0	135	3,609	38,596	42,205	42,205

# **Oregon Department of State Lands**

Revenues & Expenditures by Program/Appropriation 2007-09 Biennium Through May 2008

# 2000 SOUTH SLOUGH NATIONAL EST RESEARCH RESER

FY 2008							62007 5	SNER F	-/F								
	Biennium			r	<u>-</u>		Actual							Estimated		Projection	07-09
	to Date	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	FY 2008	FY 2009	Total 07-09	Budget
SERVICES AND SUPPLIES																	
4225 STATE GOVERNMENT SERVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,365	9,365	9,365
4250 DATA PROCESSING	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,500	10,500	10,500
4275 PUBLICITY & PUBLICATIONS	89	0	0	0	0	0	89	0	0	0	0	0	80	169	1,208	1,376	1,376
4300 PROFESSIONAL SERVICES	750	0	0	0	0	0	250	0	0	0	0	500	4,576	5,326	737,578	742,904	742,904
4315 IT PROFESSIONAL SERVICES	175	0	0	0	0	0	0	0	0	0	0	175	0	175	-175	0	0
4375 EMPLOYEE RECRUITMENT A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,993	5,993	5,993
4400 DUES AND SUBSCRIPTIONS	130	0	0	0	0	0	130	0	0	0	0	0	0	130	639	769	769
4425 FACILITIES RENT & TAXES	80	0	0	30	50	0	0	0	0	0	0	0	0	80	-80	0	0
4450 FUELS AND UTILITIES	3,641	115	0	226	138	-10	929	450	668	100	361	665	462	4,102	7,636	11,738	11,738
4475 FACILITIES MAINTENANCE	2,823	20	0	43	0	-20	148	177	149	0	1,698	608	20	2,843	3,919	6,762	6,762
4575 AGENCY PROGRAM RELATE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,038	5,038	5,038
4650 OTHER SERVICES AND SUPP	13,233	450	0	3,339	2,767	98,294	-93,720	561	589	-1,250	1,599	602	460	13,693	5,908	19,601	19,601
4700 EXPENDABLE PROPERTY \$2	558	0	0	0	0	0	0	1,519	0	-1,519	558	0	135	693	15,094	15,787	15,787
4715 IT EXPENDABLE PROPERTY	27,883	0	0	0	0	0	2,220	10,167	524	3,386	9,845	1,741	0	27,883	-19,533	8,350	8,350
Total SERVICES AND SUPPLIES	73,324	3,731	693	7,789	4,700	95,276	-82,916	14,867	2,252	3,683	18,558	4,690	12,607	85,930	979,600	1,065,530	1,065,530
CAPITAL OUTLAY																	
5100 OFFICE FURNITURE AND FIX	308	0	0	0	0	0	0	308	0	0	0	0	0	308	-308	0	0
5200 TECHNICAL EQUIPMENT	3,544	0	0	0	0	0	0	3,544	0	0	0	0	0	3,544	362,956	366,500	366,500
5600 DATA PROCESSING HARDW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5700 BUILDINGS AND STRUCTURE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total CAPITAL OUTLAY	3,852	0	0	0	0	0	0	3,852	0	0	0	0	0	3,852	362,648	366,500	366,500
Total Expense	479,883	49,456	48,299	41,153	14,254	40,821	50,006	32,776	41,785	42,716	67,547	51,070	43,437	523,320	2,077,732	2,601,052	2,601,052
Net SSNER F/F	47,712	-49,456	-48,299	-41,153	-14,254	-40,821	-24,203	-32,776	458,537	-42,716	-67,547	-49,600	-34,624	4,275	-2,605,327	-2,601,052	-2,601,052

# SSNERR Financial Report

#### **NEW BUSINESS**

# **Input on Staff Activities**

## **EDUCATION PROGRAM UPDATE**

March 4, 2008 through June 21, 2008

Demand for South Slough's education programs continues to grow as awareness of the Reserve spreads and new community and regional partnerships are strengthened. Spring and early summer have been cool and wet this year with late season storms contributing to difficult conditions and cancellations for some field-based programs. However, expanded efforts to work within the schools are building a greater understanding of the resources available through South Slough and laying the foundation for teacher training activities.

A number or organizations in Oregon are working to establish a partnership of coastal education providers in Oregon. Thus far the participants have developed a regional educational grant proposal (see item entitled "Bay Watershed and Education Training" below) and have discussed the prospect of establishing a marine education benchmark as a component of the state education standards. South Slough has participated in these efforts and hosted a local workshop to introduce standards for excellence in environmental education to a variety of local informal science educators.

The Reserve continues to support partnerships with Project Learning Tree and the Oregon Institute of Marine Biology's GK-12 program in the implementation of watershed and marine education efforts. South Slough has also recently served as a work study site for two undergraduate students from the University of Oregon's Environmental Education program. This spring, the students assisted with the delivery of field trips and gained practical experience teaching groups of students visiting the estuary.

#### VISITATION AND VISITOR SERVICES

During this period, 867 walk in guests visited the South Slough Interpretive Center, an average of 14 visitors per day. This total does not include trail and waterway users who did not enter the Interpretive Center. Most visits to South Slough continue to be associated with educational programs and trainings offered by the Reserve. Those figures are reported in the next section of this report (Formal Education Through On-site and Outreach Activities).

Walk in visitation was slightly higher than those recorded in past years during the same period. The spring 2008 reporting period includes the transition from a 5 day per week public visitation schedule to a 7 day per week schedule. In addition, the hours of operation for the Interpretive Center also changed from 8:00 till 4:30 to 10:00 till 4:30.

While no specific feedback has been sought concerning the Tuesday – Saturday schedule during the months of September through May, no negative comments have been received regarding the closure of the Interpretive Center to the public on Mondays.

A new site brochure has been published recently and has been well received thus far. The brochure "Explore the Estuary" was produced with funding assistance from the Friends of South Slough, Inc. and considerable staff involvement in the design. The brochure includes general program information, an overview of the types of habitat and life found at the Reserve and a trail map. This product has been printed in a small quantity, 10,000 copies, and will be periodically updated based on evaluation and any necessary changes to basic information such as hours and days of operation.

#### FORMAL EDUCATION THROUGH ON-SITE AND OUTREACH ACTIVITIES

During the period from February 23, 2008 to June 21, 2008, 63 formal education programs were offered for 2234 participants. A total of 198 contact hours and 85 hours of preparation time were recorded.

These numbers include two sub-categories of educational activity. *Outreach events* include activities and programs that are delivered at locations other than the Reserve and educational volunteer trainings which are used to enhance capacity for delivery of programs with volunteers. *Formal education programs* are structured educational activities with defined learning objectives and a formalized relationship to an educational entity.

Notable activities during this period included a large number of third grade classes participating in the Marine Activities and Resource Education (MARE) program who visited the Reserve. The MARE program is framed to address distinct elements of the marine ecosystem by grade level. In the MARE curriculum, third grade classes study wetlands and the estuary. South Slough staff recently participated in a MARE training workshop hosted by the Oregon Institute of Marine Biology for local teachers. Nearly local 20 teachers took part in 3 days of activities which included a focused presentation on emerging issues in Marine Science, field work with graduate students, and a day of estuary study led by South Slough staff.

The Reserve also participated this spring in the development of a three day long outdoor school for Sunset Middle School seventh grade students. The project was designed through collaboration with an interdisciplinary team of teachers including science, math, language and fine art studies. Students worked in groups of four over the course of the three days to understand and characterize the relationships between the watershed, estuary, and ocean using the South Slough drainage as the study site. Students produced posters and journals as a reflection of their findings. Post program evaluation by the teaching staff concluded that the project was successful and worthy of consideration for incorporation into the standard curriculum used throughout the school year. Several of the activities are based on the TIDES curriculum developed by South Slough NERR.

Additional work with the TIDES curriculum included field testing several activities with a small group of Sunset Middle School students on a weekly basis. The seventh grade students conducted a study of a local creek and the surrounding watershed using an introductory watershed mapping unit and remote sensing imagery. The study explored the relationship between various types of permeable and impermeable surfaces within the watershed and the overall condition of the creek. Student input will be used to refine the TIDES activities used with this class and plans to expand the use of the curriculum are currently in development.

## **International Brant Goose Monitoring Project**

A training on how to participate in the Brant goose monitoring project was conducted for Marshfield High School students in early March. Locations and protocols for goose monitoring activities were covered and students learned identification techniques. Students enrolled in Russ Namitz's ornithology class participated in several successful field experiences and collected and posted multiple observation records. The information collected by the students was submitted to the Brant Project website: <a href="https://www.padillabay.gov/brant/index.html">www.padillabay.gov/brant/index.html</a>.

The project coordinator noted that this past spring has yielded many more recorded observations than in previous years!

# Bay Watershed Education Training (BWET) grant

In early April, South Slough NERR/Oregon DSL submitted a funding proposal (the Oregon Coastal Education Initiative) in partnership with the Oregon Institute of Marine Biology, Oregon Sea Grant, the Oregon Coast Aquarium, and the Oregon chapter of the Northwest Aquatic and Marine Educators. The proposal to NOAA's office of education sought \$200,000 to support development and training in the use of a series of coastal education modules for Oregon schools. The BWET program has not been offered in the Pacific Northwest prior to 2008. Several million dollars is available to be divided between three regions including the Gulf Coast, New England, and Oregon and Washington.

The partners recently received notification that the proposal was not selected for funding. Reviewer comments indicated general support for the concept and included some constructive ideas for improvement. The partners are currently considering other potential funding sources and may submit a reduced scope version of the project to the Oregon Community Foundation's Gray Environmental Education fund in August.

# **INTERPRETIVE ACTIVITIES**

The interpretive programs offered at South Slough continue to be diverse, popular, and recognized throughout the area as high quality, interesting presentations. During this period, 30 programs were delivered to 278 participants. A total of 34 prep hours were recorded and 51 contact hours were documented. While unseasonably cool, wet weather

led to the cancellation or modification of several field-based programs, activities including art openings, lectures, and workshops engaged many participants indoors at the South Slough Interpretive Center.

Hands-on workshops, participation at several festivals and events, and a renewed "Lunch and Learn" lecture series linked to field-based volunteer trainings on Saturdays were featured this spring. Several community service activities resulted from participation by staff in a training presented by Oregon SOLV.

The newsletter and summer activity calendar have been published in print and are available on the web. Initial response has been very positive and two of the three summer science camp offerings are fully subscribed.

Developmental work on the "Explore Your Estuary" project funded by the Trust Management Services Inc. continues. Trial activities are currently being used with visitors and equipment purchases based on visitor and staff input will be made in the coming weeks.

The 2007 exhibit installation is continuing to serve visitors well and a few minor problems have been addressed with staff proposed solutions. A review of the exhibits will be made and any warranty items will be communicated with exhibit designers One + Two Inc. and Interpretive Exhibits Inc. so that they may be addressed.

#### COASTAL TRAINING PROGRAM

## **Estuary Assessment Training**

Water quality and restoration staff from watershed councils and associations along the northern, central and southern coasts attended a South Slough hosted coastal training workshop June 10-12. The objective of the training was for participants to learn how to assess the habitat restoration potential of degraded tidal marshes and former tidal marsh areas. The three day workshop involved two days of classroom activities, plus a field trip to marshes along Coalbank and Isthmus sloughs, and upper Coos Bay. The training session marked the culmination of a year's activities to develop curricula and materials, and provide needed background training in the use of geographic information systems (GIS) software to analyze coastal land use patterns.

Prior to the training, the Oregon Watershed Enhancement Board (OWEB) hired a consultant, Laura Brophy of Green Point Consulting, Corvallis, to develop a GIS-based methodology to prioritize restoration opportunities in tidally-influenced or formerly tidally-influenced lands. After the methodology was accepted it became necessary to provide training in its use, especially to watershed council staff members who will most likely carry out the assessments. Wetlands in several estuaries have already undergone the assessment, including those of the Nehalem, Yaquina, Alsea, Siuslaw, Umpqua-

Smith, Elk and Sixes rivers. Oregon has 22 major estuaries and numerous, smaller estuaries, many of which will eventually be assessed for habitat restoration opportunities using the new methodology.

SSNERR was fortunate to contract Ms. Brophy, the developer of the methodology, to provide the instruction in its use. Participants included representatives of the Coquille Indian Tribe and the Confederated Tribes of the Coos, Lower Umpqua and Siuslaw Indians, the Coos, Coquille and South Coast-Lower Rogue watershed councils, the North Coast Land Conservancy, Oregon Department of Fish and Wildlife, and the Salmon River-Drift Creek watershed council.

Cost of the curricula development and instruction was \$13,000. An \$8,000 grant was procured from OWEB for the project, and the balance was provided from SSNERR. Southwestern Oregon Community College's Business Development Center contributed to the success of the training by providing classroom space and a computer laboratory to carry out instruction.

Local landowners assisted by allowing the students access to their tide lands. The Oregon Coastal Management Program provided valuable assistance throughout the process of developing the curriculum and was instrumental in obtaining licenses to use ESRI's ArcGIS software for the training. Thanks are also due to ESRI for providing the software for the instruction at no cost.

Although the assessment training was not specifically designed to provide instruction in the use of GIS software, comments from participants indicate that the workshop provided valuable and practical grounding in using GIS techniques to evaluate land use data. Through hosting this training, SSNERR CTP staff became aware of a growing need to provide expanded GIS training. SSNERR will explore opportunities for local partnerships to provide low-cost GIS training for public agencies and non-profit organizations.

#### New Carissa salvage

In 2008 the Department of State Lands contracted with Titan Salvage of Fort Lauderdale, Florida, to remove the wreckage of the New Carissa from the North Spit beach. In response to a request by the Department, SSNERR CTP has devoted time to documenting the removal of the wreckage in both still pictures and video. During May and June the CTP coordinator has made several trips to the work site, including a trip aboard the Karlissa B, one of two work barges being used to stage the salvage operation. The barges provide raised platforms above the Carissa wreckage, allowing workers to get to and from the wreck to cut and remove the steel. Photographs of the salvage operation are being posted on the agency's website, <a href="https://www.oregon.gov/DSL">www.oregon.gov/DSL</a>.

#### Brant video

Also in the video world, SSNERR CTP teamed up with other education staff to produce a short video about the brant goose monitoring project. Brant geese migrate from the Gulf

of California to Alaska each spring, stopping en route at Oregon estuaries such as Coos Bay to feed on eelgrass. The SSNERR, along with other West Coast NERRS, cooperate with Mexican researchers to monitor the brant population. The monitoring program provides opportunities for secondary school students to learn more about ornithology and scientific methods for observing birds. The brant video is undergoing final editing and will be available by fall.

#### PUBLIC INVOLVEMENT ACTIVITIES

#### Volunteers

As of May 31, 2008 South Slough volunteers contributed approximately 1003 volunteer hours valued at about \$18,300. Volunteer contributions have included: leading hikes; classroom assistance for education programs; administrative support for the front desk; working on the SSNERR newsletter; co-leading paddle trips; sea grass sampling; eelgrass transplanting; photography; weed identification and eradication; SOLV cleanups; secretive marsh bird monitoring; community service events; and trail building and repair. These activities are listed among the many tasks in which SSNERR has received volunteer support over the years.

## **Community Outreach and Involvement**

On April 26, 2008 several SSNERR staff and volunteers assisted the Charleston Community Enhancement Corporation (CCEC) with their annual fundraiser, the Charleston Oyster Feed held at the Oregon Institute of Marine Biology (OIMB) cafeteria. CCEC board members noted that the event was a success and it provided funds enabling the group to support Charleston based projects over the next year.

In May, the Reserve partnered with CCEC to conduct a sponsored cleanup event on Hallmark Creek, a small, urban stream in Charleston that is a tributary to the South Slough. Oregon's Stop Oregon Litter and Vandalism (SOLV) provided a \$50 grant for BBQ lunch supplies for the volunteers. A great deal of trash and weeds were removed from the site. In addition, a swallow nest box and simple interpretive signs marking sensitive marsh plants were added to the area. Deborah Rudd, SSNERR's Public Involvement Coordinator, has recently been elected to serve as Secretary for this group.

The Charleston Merchants Association held their annual board member elections recently and appointed Rusty Shield of the Charleston Rural Fire Department as President. Nominations for other board positions were also considered. The Merchants also voted to allow the Charleston Rural Fire Department to take over the responsibility for organizing the 2008 Charleston Seafood Festival scheduled for August 16 & 17<sup>th</sup>. The Merchants hope to have a smaller scale event in 2009 separate from the Seafood Festival that will also bring visitors to the area.

Cape Arago Audubon Society (CAAS) is collaborating with SSNERR on several projects. On May 10<sup>th</sup>, CAAS and SSNERR shared a booth at the first annual Earth Day

celebration in Ferry Road Park in North Bend. The event provided information and education about local birds, their habitat and simple ways to for individuals to improve their own stewardship efforts. From May-September, CAAS and SSNERR are sharing an informational booth at the Coos Bay Farmers Market on Wednesdays from 9-3. So far we have had about 200 visitors to our booth.

Octoberfish, a local food, music and art festival established to provide funds to local fisherman and the communities in which they live, has begun monthly planning meetings. This year, proceeds from the Saturday, October 11<sup>th</sup> festival will go to the Charleston Food Bank. Last year several SSNERR staff and volunteers participated in a children's fish printing booth, an apple cider press station and assisted with the set-up, clean-up, and fund raising for the event. Plans are under way to have even more involvement this year.

## Friends of South Slough, Inc. (FOSS)

In April 2008, the Friends of South Slough received an award from the State Land Board for outstanding support of the SSNERR. FOSS is the first organization to receive a partnership award from the Land Board. A delegation of FOSS Board members and SSNERR staff traveled to Salem to receive the award. As part of the trip to Salem, SSNERR staff planned a tour of the West Eugene Wetlands near Eugene. The Friends enjoyed the wetlands visit and were very honored to receive the award.

Also in April, FOSS received news that Meyer Memorial Trust awarded a grant of \$9,000 in support of FOSS' efforts to support trail construction work at the Reserve. In addition to the Funding from Meyer Memorial Trust, FOSS has also contributed funding earned from sponsoring a boat raffle and holding a silent auction at their annual membership meeting. The funds will be used to support the construction of a walkway over the wetlands at the terminus of the Estuary Study trail system.

FOSS held its annual summer potluck on June 7<sup>th</sup> at the South Slough Interpretive Center. Individual FOSS members donated funds to enable "The Tuna Guys" (a local fishing business) to purchase and grill Albacore tuna for the guests. A local musician donated his time and talent to provide musical accompaniment for the event. Also, Bandon artist, Maggie Karl was on hand for the grand opening of her show of mixed media paintings. Maggie's paintings will be on display in the SSNERR auditorium through the summer. About 60 guests attended the event.

The FOSS Board is currently working to convene an advisory group to help the board develop and evaluate ideas for future projects and guide the long range direction of group.

# Stewardship Program Update

#### I. Habitat Restoration

- A. Native Oyster Re-establishment Project: In May of 2008 shellfish hatcheries in the Pacific Northwest were impacted by critically high levels of Vibrio tubiashii, a type of bacteria know to increase larval mortality. This outbreak continues to be a very serious problem for the west coast commercial oyster industry and others working to restore native oysters. V. tubiashii is common to waters on the west coast, but rarely in such high concentrations over such a large geographic area. It is not pathogenic to humans but is very pathogenic to shellfish, especially the larvae and early setters. Initially, these high levels effectively shut down virtually all hatchery based larvae production on the west coast. In June the Whiskey Creek facility on Netarts Bay installed a filtration/treatment system that allowed them to operate at approximately 30% of capacity. Fortunately, SSNERR's native oyster restoration program had contracted with Whiskey Creek to produce larvae prior to the outbreak. Now that the hatchery is back in limited operation, it has committed to producing larvae for at least half (25 bags) of the 50 bags originally planned for the South Slough Native Oyster Restoration project. This development will influence how we implement this project. We still need to determine if SSNERR will be allowed to transport broodstock oysters from Coos Bay to the hatchery Netarts Bay. If there is the potential of moving bacteria with our broodstock, we may not be allowed to utilize the hatchery. In order to confirm the condition of Coos Bay native Oysters, Steve Rumrill collected water samples in May in both Coos Bay and South Slough and had them tested for *V. tubiashii*. The results were mixed with positive detection in South Slough but no definitive detection in Coos Bay. Considering this level of uncertainty. Steve then shipped 70 oysters collected at Isthmus Slough to a tissue testing laboratory. The results of these tests will determine our ability to transport oyster from Coos Bay to the Hatchery in the Northern part of the state. If it is determined that we are not allowed to transport oysters we will have to refocus and investigate the possibility of producing larvae in-house.
- B. Oyster Relocation: In partnership with Oregon Department of Fish and Wildlife shellfish biologist Scott Groth SSNERR staff assisted in the removal and relocation of native Olympic oysters from around the dock at a defunct nickel transfer site near Isthmus Slough. This thriving bed of native oysters was slated to be radically altered by clean-up efforts that involved removing nickel contaminated sediments along the shore at this location. By providing this assistance, the Reserve was allowed to retain a percentage of the oysters for research and potential relocation through our native oyster reestablishment project.

C. <u>Eel Grass Transplanting:</u> As a follow up to the transplant work completed on the Siuslaw River in 2007 SSNERR staff and volunteers worked to transplant native eel grass due to be impacted by bridge construction activities on the Siuslaw River near Florence. The eelgrass was transplanted to an upstream location out of harms way. A similar procedure conducted last year was deemed successful resulted with approximately 40% survivorship one year after transplant. Over two days of work approximately 1,800 plants were relocated.

# II. Restoration Monitoring

# A. Wetland Reference Site monitoring projects:

1. Project implementation continues on the Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET)-funded tidal wetland reference site monitoring project, the \$213K, two year (2007-08) project is designed to characterize of a network of coastal wetlands in Oregon that can be used as reference wetlands for restoration and mitigations projects in Oregon's estuaries- and to test new uses of existing technology for measuring tidal inundation period and water level.

The second year of summer field work is just beginning at the project sites in Blind Slough scrub shrub swamp on the Lower Columbia estuary; the Coal Creek forested swamp in Nehalem Bay; the low salt marsh of Siletz Keys on Siletz Bay; a high salt marsh on Millport Slough in Siletz Bay; Hidden Creek low salt marsh and Hidden Creek high salt marsh in the South Slough NERR. In early July, project team members will collect the second round of invertebrate community samples from tidal channels at each site. In mid July project team members will collect the second annual vegetation community data at the salt marsh sites (scrub-shrub and forested sites do not require yearly sampling). We will continue taking steps to limit the spread of the invasive exotic species *Potamopyrgus antipodarum* (New Zealand mudsnail) between sites since last summer's data indicated its presence at two of the sites.

We continue collaborative work with NOAA CO-OPS Coastal program (Coastal: Coastal Oceanographic Applications and Services of Tides and Lakes) in the analysis of our water level data. They have completed initial analyses of our data and have developed tidal datums for each site (which still need to be tied to a vertical control datum to allow comparisons between sites) and have graphed tidal inundation frequency and duration data that are critical to evaluating the usefulness of the iButton temperature loggers we hope to demonstrate as the basis for a cheap and easy way for restoration practitioners to measure tidal inundation at various project and reference sites. This level of tidal analysis far exceeds our original expectations for this project, and continues to represents a major collaborative advance.

We continue working with the Corvallis firm of Alpha Omega (AO) to produce the final multichannel sensor/logger prototypes so we can run tests on the fully functioning product we've been working towards on this project. So far we have tested "alpha" versions of the loggers which have performed well but lack the wireless function. The final versions of these water level, conductivity and temperature loggers will have the ability to transfer data to data collectors situated above tidal influence through wireless communication (creates a back-up of the data), and users will be able to download data wirelessly without moving the data loggers. We anticipate that AO will deliver these final "beta" prototypes in early July for summer field tests.

The original grant period for this project was slated to end in September 2008. We have applied for, and received approval for a one year, no-cost extension from CICEET on this grant. The additional time will enable us to complete summer field tasks, data analyses and report development over a reasonable period of time.

2. We have also initiated work on a NOAA Restoration Center funded wetland reference site monitoring project. This \$75K, 3 year pilot project (2008-2010) will initiate monitoring at a network of "least-disturbed" tidal wetland reference sites (based at Reserves) and advances the biomonitoring element of the NERRS System Wide Monitoring Program. Similar to the CICEET project outlined above, use of these data is intended to improve the evaluation of tidal wetland restoration and mitigation projects. This pilot project focuses on vegetation community and groundwater monitoring and is being implemented by members of the ECOS lab team, led by Craig Cornu who shifted to the new position coordinator of monitoring programs in April.

In April, several ECOS lab team members participated in a four day training workshop held in at the Chesapeake Bay (VA) NERR where we developed skills in real-time kinematic GPS topographic surveying as well as groundwater monitoring and soil sampling techniques. In May, we selected the project sites in Oregon which pair one "least-disturbed" tidal wetland reference site with at least one tidal wetland restoration that has received support from NOAA's Community-based Restoration program (CRP). Since we have no CRP-funded restoration projects in the Reserve, the project sites in Oregon include two Yaquina Bay sites Paired with two Reserve sites. The paired sites in the Reserve are Danger Point reference marsh (high salt marsh)(SWMP biomonitoring site) and the Kunz marsh restoration site (project implemented in 1996); in Yaquina Bay the paired sites are the "Y-28" reference marsh (scrub-shrub marsh) owned by The Wetlands Conservancy and the "Y-27" Mid-Coast Watershed Association's restoration project site (project implemented in 2002), funded in part by the NOAA CRP.

In June, members of the ECOS lab team began establishing transects at the project sites and installing groundwater wells along each transect. We will

use the wells to continuously track seasonal groundwater fluctuations for 2-4 week periods for the next three years. We will use data loggers to quantify the frequency and duration of marsh soil saturation and record changes in interstitial water salinity and temperature in both restoration and reference sites. The ECOS lab team will return to the sites in July to record vegetation species presence and percent cover at 10 permanent plots along each transect.

Long-term data sets are sorely needed to quantify natural variability in a variety of marsh attributes. The aim of the three year pilot project is to begin to establish the range of reference values for this "starter" set of attributes which we will compare with data from project restoration sites and ultimately with data from other restoration projects implemented in similar habitat classes. The idea is to add additional attributes and to continue yearly monitoring beyond the three year pilot project.

Note: because the NOAA Restoration Center-funded reference site project and the NOAA/CICEET-funded reference site project have similar goals, we anticipate combining the two projects into an eight-site reference network for tidal wetlands in Oregon. We propose to work with additional partners to build a regional network to include tidal wetland reference sites in northern California and Washington.

#### III. Watershed Activities

- A. <u>Invasive Snail Research project</u>. Assiminea parasitologica is a pepperconsized estuarine snail known to Asian waters and positively identified in Coos Bay last year. Likely introduced by shipping, it is uncertain how long it has existed here, but if recent surveys are any indication they have either been here for some time or are finding Coos Bay waters very much to their liking. In May 2008 Dr. Jim Carleton, who first positively identified *A. parasitologica* in Coos Bay in 2007, returned to survey the area more extensively and provide an identification workshop at OIMB. Through this survey large populations were revealed throughout much of the Coos estuary, Thus far, this snail has not been found in the Sough Slough inlet.
- B. <u>Secretive Marsh Bird Surveys:</u> On three separate occasions crews lead by Reserve staff have conducted surveys for secretive marsh birds suspected to occur in our region (Virginia Rail, Sora Rail, American Bittern and Piedbilled Grebe). Surveys follow a protocol being used throughout the US and are conducted in early mornings or late evenings and consisted of broadcasting recorded calls and documenting responses. The initial surveys of South Slough Wetlands revealed several Virginia rails. Surveys will be conducted in the summer, autumn, winter, and again in the spring. This

- element of the NERRS biomonitoring program will emphasize volunteer involvement.
- C. <u>Oregon Youth Conservation Corps Crew</u> In partnership with the SWOYA Boys and Girls Club, SSNERR is hosting another Oregon Youth Conservation Corps crew this summer. The OYCC crew began work on June 23<sup>rd</sup> and will wrap things up on August 7<sup>th</sup>. They will work with a number of Reserve staff members on the following projects:
  - Anderson Creek Restoration Project invasive species control (focus on reed canary grass, blackberry, thistle)
  - Kunz Marsh Restoration Project geotextile cell divider repairs
  - Kunz Marsh Restoration Project fish use monitoring project (placing seine nets across project cell openings at high tide and counting and releasing fish on the ebbing tide)
  - Upland habitat enhancement- fuels removal: small diameter understory tree thinning and removal and brush clearing
  - Port Orford cedar root rot mapping
  - Native oyster recruitment
  - Purple loosestrife removal at Barview Wayside wetland mitigation project site
  - Various trail construction and maintenance projects

#### IV. Meetings / Presentations

South Slough NERR Stewardship Program Coordinator, Hans Klausner:

- May 2008 Attended the American Fisheries Society, Stream Restoration Workshop in Portland, and was introduced to local restoration practitioners and technical advisors that have worked with SSNERR in the past.
- May 2008 At the request of Jake Robinson, Bob LaPort provided us with a tour of the Coos County Forest and a discussion of historical silvicultural practices in particular areas that could shed light on the status of similar areas within the Reserve.
- May 2008 Was introduced, along with Jake Robinson, to Coos Watershed Association Board of Directors during their May meeting.
- May 2008 Accompanied Jake Robinson during a brief meeting with the Coos County Board of Commissioners to introduce ourselves and the forest management planning the Reserve is embarking upon. Also thanked them for allowing Bob LaPort to assist in this endeavor.

- May 2008 Attended a workshop provided by Dr. Jim Carleton focused on the identification of *Assiminea parasitologica* and a brief discussion of its introduction to North American waters.
- June 2008 In partnership with Laura Brophy of Green Point Consulting, the SSNERR Coastal Training Program offered three days of training in estuary assessments and prioritization methods for restoration professionals. Hans attended the entire training and assisted with the GIS modules as needed.

#### INPUT ON STAFF ACTIVITIES

#### RESEARCH AND MONITORING PROGRAM UPDATE

During the period from 5 March 2008 to 30 June 2008 the South Slough NERR staff members continued work associated with research and monitoring projects. Progress is described below:

### I. NERRS System-Wide Monitoring Program (SWMP):

During the winter and spring, Steve Rumrill, Ali Helms, and Adam DeMarzo continued to operate the South Slough NERR SWMP. Items A-E (below) summarize these activities:

A. <u>Estuarine Water Quality</u>: Ali and Adam retrieved, downloaded, recalibrated, and redeployed YSI-6600 EDS dataloggers at SSNERR's four long-term monitoring stations on March 24-26, May 5-7, and June 16-18, 2008. Fouling organisms were dislodged on a monthly basis from the SWMP stations. Ali Helms Water submitted quality datasets and metadata for 2007 to NOAA's Central Data Management Office (CDMO). The data are currently under final data review. Ali is currently processing quarterly datasets, monthly log sheets and metadata for January – March 2008 for submission to the CDMO by August 1, 2008.

South Slough is a participant in a NOAA/NERRS project to provide real-time water quality information as part of the national backbone of the US Integrated Coastal Ocean Observing System. Providing real time data involves equipping SSNERR's SWMP stations with satellite telemetry equipment. Upgrading the SWMP monitoring stations has involved overcoming several technical challenges. Telemetry equipment was installed at the Charleston Bridge SWMP station in Oct 2006 and on the Valino Island site in August 2006. Initial transmissions worked consistently but for a variety of reasons, the Charleston Station stopped transmitting on June 8, 2008 and the Valino Island SWMP station stopped transmitting in March 2008.

The datasondes have been collecting continuous data; however, transmission of the data via satellite has not been successful. Sutron, the manufacturer of the satellite transmitter and associated equipment, helped to get the equipment back into operation by making some changes to their equipment and firmware in response to changes made to the GOES (Geostationary Operational Environmental Satellites) system. The South Slough staff is also working with personnel from the NERRS Centralized Data Management Office to troubleshoot the software settings in the radio transmitter equipment used to send real-time environmental data from the Valino Island and Charleston SWMP stations to the NERR CDMO.

The Charleston Water Quality station is currently collecting and transmitting data; however, the transmission signal strength is low and requires continued troubleshooting. Near real-time measurements of estuarine water parameters are now available for the

Charleston Dock and Valino Island SWMP stations at the NERR SWMP CDMO website (http://cdmo.baruch.sc.edu).

Installation of the GOES satellite telemetry system is supported at three of the South Slough NERR SWMP stations by NOAA grant funds administered by the National Estuarine Research Reserve Association (NERRA), and at two additional SWMP stations with funds provided the NOAA Coastal Services Center through cooperation with the Northwest Association of Networked Ocean Observing Systems (NANOOS).

South Slough has recently acquired two additional YSI 6600 EDS datasondes and associated sensors, and two new sets of satellite telemetry equipment. The additional telemetry equipment allows incorporation of the Sengstacken and Winchester Creek SWMP stations as remote telemetry sites. This June, 3 sites along the Sengstacken Arm of South Slough between Long Island point and Elliot Creek were evaluated for their suitability to accommodate the Sengstacken SWMP water quality station. The existing station must be relocated due to sediment build up at that site. Sites are being ranked based on water depth at low tide and line-of-site access to the GOES satellite. The newly acquired telemetry equipment is presently being assembled and prepared for deployment. Two 20 ft tall marine grade stainless steel towers have been constructed and will be installed to support the datasondes and telemetry equipment. Complete installation of the towers and telemetry equipment is scheduled for summer/fall 2008.

B. Weather Conditions: The South Slough NERR SWMP weather station in Charleston operated continuously during the March-June 2008 time period recording air temperature, relative humidity, barometric pressure, wind speed and direction, precipitation, and solar radiation every 5 seconds. Monthly maintenance checks were completed for all the meteorological station sensors/solar panel. Data was retrieved from the CR1000 on March 31, April 29, May 13, and June 12, 2008. A GOES satellite transmission system has been installed on the meteorological station that automatically sends data to the NERR Centralized Data Management Office. The wind sensor was reoriented from magnetic north to true north on April 3, 2008 in order to provide a more standardized dataset across the NERRS.

The near real-time measurements and historical data from the SSNERR SWMP meteorological station are now available on the CDMO website (<a href="http://cdmo.baruch.sc.edu">http://cdmo.baruch.sc.edu</a>). The meteorological data, monthly log sheets and metadata for 2007 and the quarterly datasets for January – March 2008 are currently being processed for submission to the CDMO by August 1, 2008.

C. <u>Estuarine Nutrients</u>: Ali Helms and Adam Demarzo collected and processed monthly water samples on March 18-19, April 15-16, May 28-29, and June 19-20, 2008 for analysis of inorganic nutrients and Chlorophyll (plant pigment) concentrations. Samples were collected at three of the four SWMP water quality stations plus an additional station located near the mouth of the Coos estuary at the OIMB boathouse auditorium. During each monthly sampling period, three replicate samples were collected at each site during high and low tides. An automated sampler was also deployed at the Charleston site that

collected 1-liter water samples every 2.5 hours over a period of 25 hours. Each of the 35 monthly nutrient samples was filtered and frozen and then sent to the University of Washington Oceanography Laboratory for analysis. Each of the monthly Chlorophyll samples was analyzed at the SSNERR ECOS Lab. Volunteer Ann McMann assisted with chlorophyll processing. The monthly water samples were also analyzed locally to determine concentrations of *E. coli* and total Coliform bacteria (or *Enterococcus* bacteria). Adam is currently processing the nutrient datasets and metadata for 2007 for submission to the CDMO.

D. Availability of SWMP Real-Time Data / Data Products for Shellfish Growers: South Slough NERR is a participant in a pilot project to make estuarine water quality information available on a real-time basis. The measurements of estuarine water parameters are now available on several websites (http://nerrs.noaa.gov/ioos/realtime\_map.html; http://cdmo.baruch.sc.edu; http://www.weather.gov/oh/hads/; http://www.nws.noaa.gov/oh/hads/; http://www.nanoos.org). A website specifically designed to deliver real-time water quality data and data products to shellfish growers has been operating since 3 July 2007 (http://www.nanoos-shellfish.org). The website provides information about water quality conditions for shellfish growers in Oregon, Washington, and Alaska. The project was developed through cooperation between the South Slough, Padilla Bay, and Kachemak Bay NERRS and Mindfly Web Development and serves as a data delivery element of the US Integrated Ocean Observing System. The website reconfigures data from the NERRS Centralized Data Management Office and develops new data products that meet the specific needs of oyster growers.

This project is currently being evaluated using grant funds from the NERR system. The evaluation is being led by Cathy Angell, Coastal Training Program Coordinator at the Padilla Bay NERR. Fifteen shellfish growers have responded to an online survey that addresses the project's utility and value to the users and identifies suggestions for future directions. A meeting in March 2008 including participants from NANOOS, NERRS, and the Pacific Shellfish Institute was held to discuss additional ways to evaluate the project, find ways to make the website and data products available to more growers, and to add weather information to the web site.

New water monitoring sites will be added to the web site: One located at South Slough near the Coast Guard housing unit in Charleston and three Washington state locations (Squaxin Passage at Carlyon Beach and a site in central Willapa Bay). The current Padilla Bay site at Joe Leary Slough will be moved to a more desirable location. Plans are to change the website to expand the times-series graphs to display weekly data (current time increment available is 12-72 hours), and to allow raw data to be downloaded directly to an Excel spreadsheet.

E. <u>SWMP Data Management and Oversight Committees</u>: Steve Rumrill continued to serve as a member of the NERR SWMP Data Management Committee and the SWMP Oversight Committee. These committees work to ensure consistency and compliance with SWMP protocols and to provide guidance and direction to the SWMP Centralized

Data Management Office. The Oversight Committee uses email discussions to review field based operations and to identify and develop solutions for site-specific problems linked to the operation of the NERR SWMP. Steve and other members of the committee have contributed to the development of solutions to ongoing technical issues associated with program advancements, human resource issues within the NERRS CDMO, and have helped solve problems at several of the NERR sites.

#### **II. Research Program**

A. Research Manuscript in preparation: Steve Rumrill, Ali Helms, and Adam DeMarzo continue to collaborate with Tim O'Higgins (USEPA) to produce a manuscript entitled Seasonal and long term patterns of physico-chemical parameters in South Slough, Oregon: eutrophication or ocean-estuary coupling. The paper will summarize SWMP data collected at South Slough. The team plans to submit the manuscript for publication by a scientific journal some time later this year.

B. Investigation of Estuarine Bacterial Contaminants: As part of the monthly water quality monitoring program, South Slough staff members measure bacterial contaminants (Total coliform, Escherichia coli, Enterococcus) in tidal waters of the South Slough (see part 1.C. Tidal Forcing of Estuarine Nutrients, above). Staff members David Waltz and Pamela Blake from the Oregon Department of Environmental Quality are using SSNERR bacteria datasets to develop the Total Maximum Daily Load (TMDL) standards for fecal bacteria in the Coos Bay estuary. South Slough NERR will continue to provide data and technical support to DEQ as they develop the TMDL standards, and will offer assistance with extension of the detailed information on bacteria for the South Slough estuary into the more expansive regions of the Coos Estuary. South Slough NERR staff members also continued to provide technical and logistic support for the research activities conducted by visiting investigators from Portland State University, Dr. Elize Granek and Amanda Hillman, who are working to describe the mechanisms of bacterial transport into the surf zone for several small coastal streams located along the southern Oregon coast. In addition, volunteers from the Surfrider Foundation continued to use the facilities and equipment at the South Slough NERR Estuarine and Coastal Science Laboratory for their routine monitoring of bacterial contamination at several local beaches.

C. NOAA McARTHUR II Research Cruise: South Slough NERR conducted a research cruise aboard the NOAA Ship McARTHUR II over the period of 20-27 April 2008. Steve Rumrill served as chief scientist for the cruise, and the science team consisted of staff members from the South Slough NERR (Ali Helms, Adam DeMarzo), the University of Oregon (Alexandra Bullis), Oregon State University (Wiley Evans, Keith Karageorge), the National Marine Fisheries Service (Jennifer Menkel), a visiting professor sponsored by the NOAA Teacher-at-Sea Program (Scott Donnelly, Arizona Western College), and three volunteers (Ben Grupe, Bob Sleeth, Don Luce). The primary objectives of the research cruise were to document the dissolved oxygen levels in nearshore ocean waters along the continental shelf prior to development of the 2008 upwelling season; and collect information to characterize the links between the Coos

estuary and the nearshore waters of the Pacific Ocean. The scientific team worked with the ship's officers and crew to complete a series of Conductivity Temperature and Depth (CTD) casts, collect water samples, and gather zooplankton samples at a total of 52 oceanographic stations along the continental shelf of Oregon between Astoria and Cape Blanco. Water samples and measurements of dissolved oxygen levels were recorded at 26 stations along the shelf to characterize nearshore ocean conditions prior to development of an upwelling/hypoxia event. CTD casts, water samples, and zooplankton samples were also collected at 12 stations west of Coos Bay to characterize the physical and biotic conditions of nearshore ocean waters from the mouth of Coos Bay seaward over the continental shelf. Water samples, CTD casts, and zooplankton samples were also collected at seven stations extending seaward from the mouth of the Coquille estuary and from seven stations extending seaward from the mouth of the Umpqua River estuary. Instrumentation used during the cruise included a continuous flow-through system for the measurement of dissolved gasses (pCO<sub>2</sub> levels) and the signature of phytoplankton that can contribute to the formation of Harmful Algal Blooms. Datasets generated by the cruise were contributed to the Oregon Hypoxia Research Program operated by Drs. Jack Barth and Stephen Pierce of Oregon State University.

D. Transplant of Eelgrass in the Siuslaw River Estuary: South Slough NERR staff members continued to work with the Oregon Department of Transportation (ODOT) on the transplant of eelgrass (Zostera marina) from the site of the new Highway 126 bridge over the North Fork of the Siuslaw River. Steve Rumrill visited the site on 6 May 2008 to assess the status and condition of the 2,700 eelgrass plants that were transplanted to a new location in June 2007. The plants that were moved to the lower and middle tidal elevations survived well, while only a few plants in the upper tidal elevation survived. Steve also worked in the field on 4 June 2008 with ODOT and Arrow Coyote, a representative from the Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians to identify the location of a historic fish weir site located near the eelgrass transplant site. Staff members from the South Slough NERR (S. Rumrill, A. Helms, A. Demarzo, H. Klausner, J. Tally, D. Rudd, P. Wilson), Oregon Dept. of Environmental Quality (E. Clough), and volunteer Jeanne Cureton, worked with ODOT wetland specialist Irene Ulm from 4-6 June 2008 to transplant an additional 1,800 plants to a site upstream from the Highway 126 bridge. Steve Rumrill presented a seminar titled "Experimental Transplant of a Small Eelgrass (Zostera marina) Bed within the Siuslaw River Estuary, Oregon" at the Annual Northwest Algal Symposium on 6 April 2008.

E. <u>Pacific Coast Regional Marine Research Plan</u>: Steve Rumrill continued to work as a co-principal investigator on the project titled "*Developing a Research and Information Plan for the California Current Large Marine Ecosystem of Coastal Washington, Oregon, and California*." The project is administered by Oregon Sea Grant, and supported by a \$500,000 grant from the National Sea Grant Program over the period of 2006-2008. The project team held a series of sixteen workshops (4 in CA, 6 in OR, and 6 in WA) between May 2007 and January 2008 to gain input from coastal stakeholders on needs for new information and research to aid in the transition to an ecosystem-based approach to management of marine and estuarine ecosystems. The workshops were attended by over 600 participants. Opportunities for input were also provided through a

web-based survey completed in February 2008. The project team database includes over 5,000 comments and suggestions for incorporation into the tri-state plan. The team held a conference call in June 2008 to discuss the next steps, and a meeting in San Francisco in June to prioritize the research recommendations and to produce the final report. The project management team also met with representatives from the natural resource staff to the Governors of California, Oregon, and Washington, and representatives from the northwest tribal nations, to provide an update on development of the regional marine research plan and to coordinate development of the document with the West Coast Governors Agreement – Action Plan. The tri-state research plan has been identified as an integral component of the West Coast Governors' Agreement on Ocean Health.

F. NOAA – Integrated Ecosystem Assessment: Steve Rumrill participated in a NOAA/National Marine Fisheries invitational workshop held in Portland, OR this June. The purpose of the two day meeting was to help NOAA define the focus, geographic extent, and development of an Integrated Ecosystem Assessment (IEA) of the California Current region of the Pacific coast of the United States. The workshop sessions helped to refine the objectives and processes that are included in the IEA, and identified ways in which the Regional Associations of the Integrated Ocean Observing Systems can coordinate and contribute to development of the larger-scale IEA. The biological and ecological components of the IEA will most likely be encompassed by the Pacific Coastal Ocean Observing System (PACOOS). At the request of the Oregon Governor's office, Dr. Steve Rumrill has been invited to serve as the Oregon representative to the governing council of PACOOS.

G. Restoration of Native Olympia Oysters: Steve Rumrill continued to work this spring with US Dept. of Agriculture representative Mark Camara to develop a common garden approach to the experimental outplanting of native Olympia oysters (*Ostrea conchaphila*) in the South Slough estuary. Information about variability in DNA microsatellites generated by OSU graduate student D. Stick and Mark Camara indicates that the Olympia oysters from Coos Bay exhibit a tight clustering with the oysters from Willapa Bay, WA and Tomales Bay, CA, and that the clustering of these disparate populations is most likely an artifact of their introduction to Coos Bay by the commercial mariculture industry. A reciprocal transplant approach (or common garden experiment) will be used that will include outplanting of juvenile oysters (cultch) from two different sources of broodstock (Willapa Bay and Coos Bay). The oysters will be placed side-by-side into the tideflats of the South Slough where they will be monitored for survivorship, growth, onset of reproduction, and susceptibility to predation, overgrowth competition, and sedimentation.

An outbreak of *Vibrio* bacteria occurred along the Pacific Northwest coast in April and May 2008, resulting in the closure of the commercial oyster cultivation operations throughout the northwest and temporary closure of the Whiskey Creek Shellfish Hatchery in Netarts Bay OR. *Vibrio* bacteria cause mortality of oyster larvae, and the outbreak raised concerns about the success of the 2008-2010 oyster crops. High numbers of *Vibrio* bacteria were simultaneously detected in Humboldt Bay CA, Yaquina Bay and Netarts Bay OR, and Willapa Bay WA in early May 2008. Steve Rumrill collected water

samples in May 2008 from the South Slough near Charleston and Coos Bay near North Bend and sent them to AquaTechnics, Inc. in Sequim WA for analysis. The water samples from South Slough tested positive for *Vibrio* and the water samples from Coos Bay were negative for *Vibrio*.

On 8 June 2008, Dr.Rumrill sent a group of 60 adult Olympia oysters to shellfish pathologist Dr. Ralph Elston at AquaTechnics, Inc for a histological investigation of potential pathogens and parasites in the tissues of the adult oysters. The results indicate that the Coos Bay populations are free from a series of potentially harmful organisms. However, about 17% of the oysters from Coos Bay contained cells that exhibited evidence of nuclear degeneration. The cause of the cellular degradation is not known, and it is recommended that the Coos Bay population be isolated during hatchery operations to generate cultch. Based on these results, Steve Rumrill submitted an application to the Oregon Department of Fish and Wildlife for a permit to transport about 200 Olympia oysters from Coos Bay to Netarts Bay for the broodstock and hatchery work. The ODFW Transport Permit request is pending.

Staff members from South Slough NERR (S. Rumrill, A. Helms, A. DeMarzo, C. Cornu, H. Klausner, J. Robinson) provided assistance to the ODFW Shellfish Biologist Scott Groth on 20-22 May 2008 to salvage a local population of Olympia oysters that were slated to be removed from a site near a former industrial ore processing site in Coos Bay. The sediments at the site are contaminated and are scheduled to be removed by backhoe, but the oysters were not contaminated. The team counted, measured, weighed, and removed approximately 4,500 oysters. The oysters were put into bags and placed in the tidal channel for temporary storage. The bagged oysters were then transplanted back into a clean mixture of new rock and shell placed into the intertidal zone.

# III. Research Studentships and Internships

A. Summer Interns Two summer research interns have initiated their work at the SSNERR to investigate ecological aspects of the early recovery of the Olympia oyster populations. Kevin Cellura, a science teacher at Marshfield High School is studying the potential differences in survival, growth, and susceptibility to predation and overgrowth competition between populations of oysters from Coos Bay and Willapa Bay. Kevin hopes to determine whether the local populations have become better adapted to the ecological conditions in the Coos estaury. Rheannon Arvidson is a Portland Community College student. She is investigating water flow and turbulence created by single, double, and triple clusters of oysters that recruit and grow in successive generations.

SSNERR summer research intern, Jill Alexander began work at the SSNERR Estuarine and Coastal Science Laboratory on 30 June 2008. Jill is an undergraduate student at Oregon State University and is working with the SWMP water quality and nutrient database to assemble a series of monthly water maps designed to illustrate seasonal and tidal changes in the characteristics of water in the South Slough estuary.

B. NERR Graduate Research Fellows: Two NERR Graduate Research Fellows (GRFs) conducted components of their graduate thesis work over the spring within the Reserve. The NERR GRFs are Tim Davidson (Ph.D. candidate; Portland State University) and Margot Hessing-Lewis (Ph.D. candidate; Oregon State University). Tim's investigation focuses on "Dispersal, burrow creation, and competition in the invasive Australasian burrowing isopod Sphaeroma quoianum in the South Slough and other Pacific coast estuaries." Tim continued to collect information to describe the rate and extent of burrow formation in a variety of different substrata. Burrow volume was highest in Styrofoam, followed in descending order by marsh bank, sandstone, and non-decayed wood. Isopods created the longest burrows in Styrofoam and marsh banks. In addition, Tim is currently working on an experiment to determine whether the presence of factors such as, living isopods of both sexes, crushed conspecifics, and burrowed substrata influences isopod settlement.

Margot Hessing-Lewis' graduate thesis project is focused on "Measuring Eelgrass-Macroalgae Interaction Strength in Upwelling Influenced Estuaries in Oregon." Margot continued seasonal monitoring of eelgrass habitats at four study sites in the South Slough. She has been conducing monthly assessments of eelgrass and macroalgae including biomass, density, and percent cover, and profiling water column conditions including temp, salinity, dissolved oxygen, and nutrients. In addition, Margot is conducting a second-year field experiment to investigate the responses of eelgrass to the addition and removal of macroalgae. Margot's work will help describe how marine-derived subsidies function as drivers of macroalgae blooms, and will evaluate the potential for macroalgae abundance to serve as an ecological indicator of nutrient loading in the South Slough and Coos Estuary.

<u>C. Graduate Student Thesis Advisory Committees</u>: Steve Rumrill continued to serve as a member of several graduate student thesis advisory committees. These students investigate a variety of marine and estuarine ecological problems and coastal management issues. The student thesis work takes place primarily in the South Slough NERR, the Coos Estuary, and other regions of the southern Oregon coastal zone.

#### Ongoing Thesis Work:

Pamela Archer OSU / Marine Resource Management

Margot Hessing OSU / Zoology Lisa Turnbull University of Oregon

Holly Keammerer Oregon Institute of Marine Biology Heather Austin Oregon Institute of Marine Biology