San Juan County

Grant No. G0600034

PROJECT TITLE: Eelgrass Mapping at Priority Shallow Water Bays

TASK NO: 5

(___) ANNUAL REPORT (January 1 – December 31)
(___) WORK PLAN
(___) PROGRESS REPORT No. 1 ☐ No. 2 ☐ No. 3 ☐
(___) FINAL PROGRESS REPORT
(___) PROJECT COMPLETION REPORT
(___) SUMMARY REPORT
(___) TECHNICAL REPORT
(XX) PROTOCOL

DATE SUBMITTED: November 30th 2005

11/30/05

12/22/05

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San Juan County Marine Resources Committee
Protocol for Task 5 Eelgrass Mapping at Priority Shallow Water Bays
November 30, 2005

2006 Eelgrass Mapping Project

Puget Sound Submerged Vegetation Monitoring Project Results for Flats (shallow bay) Sites for San Juan County, Washington

Location	1995 (ha)	2001 (ha)	2003/04 (ha)
Blind Bay	6.5	2.1	2.04
False Bay	3.6	1.9	4.12
Fisherman Bay	13.8	11.8	9.64
Fossil Bay	5.2	4.6	1.83
Garrison Bay	2.1	2.1	trace
Mitchell Bay	1	1.4	0
Nelson Bay	7.2	2.2	0
Shoal Bay	2.6	1.8	3.16
Shallow Bay	3.1	2.6	5.15
Westcott Bay	12.7	6.6	0
Totals	57.8	37.1	25.94

(2005. Dowty et al. WADNR and PSAMP)

2006 Eelgrass Mapping Objectives

1. Determine if loss is still occurring in Blind Bay, Fisherman Bay and Fossil Bay (MRC supported project).

2. Determine if recovery is occurring in Westcott Bay, Garrison Bay, Nelson Bay and Mitchell Bay (MRC supported project).

3. Determine if populations are stable in False Bay, Shoal Bay and Shallow Bay (currently unfunded).

Methodology

To answer the questions outlined above, a combination of methodologies will be employed. First, DNR Underwater Videographic methodology for submerged vegetation monitoring of eelgrass flats (2005 Dowty et al) will be employed along the same transects as sampled by DNR in 1995, 2001 and 2003/04 shallow bay sampling. Work will be conducted by Dr. Sandy Wyllie-Echeverria (UW), Tina Whitman (FSJ) and Jim Slocomb (Contractor). In addition, spatially explicit underwater video photography techniques will be used throughout Westcott, Garrison, Nelson and Mitchell Bays to identify and map any eelgrass recovery throughout the bay. Work will be conducted by Dr. Sandy Wyllie-Echeverria (UW), Tina Whitman (FSJ) and Jim Slocomb (Contractor). Also utilizes DNR underwater video methodology but mapping, not monitoring protocols (2004 Buffum Field et al.). . All project staff participated in the county-wide assessment

of the outer-line of eelgrass underwater videography and mapping project conducted in 2003 and 2004 that used the same, DNR approved standards. Post-processing of video will be conducted by one trained University of Washington student /researcher, also using DNR methodology and oversight. All aspects of the project will be conducted in close coordination with DNR submerged aquatic vegetation monitoring program staff (primarily Blaine Reeves, Helen Berry and Tom Mumford).

S. Buffum-Field, J. Slocomb, S. Wyllie-Echeverria, J. Norris, I. Fraser and J. Cordell. 2004. The San Juan County Eelgrass Survey and Mapping Project. 2004 Friends of the San Juans. Friday Harbor, WA. Appendices A. WDNR Underwater Videographic and Hydroacoustic Eelgrass Survey Methodology and B. GIS Methodology. (See Attached)

P. Dowty, B. Reeves, H. Berry, S. Wyllie-Echeverria, T. Mumford, A. Sewell, P. Milos and R. Wright. 2005 Puget Sound Submerged Vegetation Monitoring Project 2003-04 Monitoring Report. WA Department of Natural Resources, Puget Sound Ambient Monitoring Program. Olympia, WA.

Timeline

a. Winter 2006: Site selection and methodology finalized based on latest 2005 monitoring results and prioritization by eelgrass project team.

b. Spring 2006: Mapping protocols and survey schedule planned.

c. Summer 2006: Underwater videography and spatial data collected.

d. Summer 2006: Data post-processing.

e. Early Fall 2006: Mapping

f. Fall 2006: Data Compilation and Distribution.