

QUALITY ASSURANCE PROJECT PLAN ADDENDUM 1:

Marine Resources Committee Intertidal Forage Fish Spawning Survey

Prepared by: Dana Oster, Northwest Straits Commission

10441 Bayview Edison Road
Mount Vernon, WA 98273
(360-428-1043)

Prepared for: Washington Department of Ecology

December 2020

Based on EPA guidance CIO 2106-G-05 (2012)



This project has been funded wholly or in part by the United States Environmental Protection Agency. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency under Assistance Agreement [CE-01J65401]. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

Publication Information

This is an addition to an original Quality Assurance Project Plan. It is not a correction (errata) to the original plan.

Author and Contact Information

Northwest Straits Commission
10441 Bayview Edison Road
Mount Vernon, WA 98273

Clallam County Marine Resources Committee
223 East 4th St.
Port Angeles, WA 98362

Island County Marine Resources Committee
P.O. Box 5000
Coupeville, WA 98239-5000

Jefferson Marine Resources Committee
121 Oak Bay Rd
Port Hadlock, WA 98339

Whatcom Marine Resources Committee
322 N. Commercial St. Suite 110
Bellingham, WA 98225

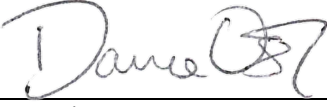

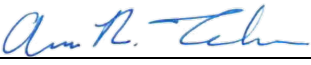


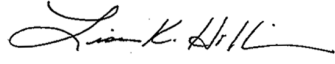

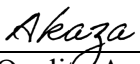
Quality Assurance Project Plan

Addendum 1: Marine Resources Committee Intertidal Forage Fish Spawning Survey

December 2020

By Dana Oster, Anna Toledo, Helle Andersen, Austin Rose, Monica Montgomery

Approved by

Signature: 	Date: 12/22/20
Dana Oster, Marine Program Manager, Northwest Straits Commission	
Signature: 	Date: 12.22.20
Cathy Lear, Clallam Marine Resources Committee	
Signature: 	Date: 12/22/20
Anna Toledo, Island Marine Resources Committee	
Signature: 	Date: 12/22/2020
Monica Montgomery, Jefferson Marine Resources Committee	
Signature: 	Date: 12/29/20
Austin Rose, Whatcom Marine Resources Committee	
Signature: 	Date: 1/06/21
Lisa Hillier, Biologist- Marine Fish Science Unit Washington Department of Fish and Wildlife	
Signature: 	Date: 1/26/2021
Jennifer Grimm, EPA Grants Coordinator, Puget Sound Partnership	
Signature: 	Date: 12/22/2020
Arati Kaza, Quality Assurance Officer, Department of Ecology	

3.2 Study Area

The index survey sites and select restoration sites sampled for this program span the seven counties in the NWSC area. Survey sites may occasionally change as directed by Washington Department of Fish and Wildlife (WDFW), data results, or restoration site needs. If sites change, a QAPP addendum will be submitted to include site changes. Survey sites include (Figure 1):

County	Site Name	Latitude (decimal degrees)	Longitude (decimal degrees)
Clallam County	Cline Spit	48.150493	-123.153037
Clallam County	Ediz Hook: Tesoro Beach	48.137483	-123.460383
Clallam County	Ediz Hook: W. Port Angeles Row Club	48.13855	-123.457083
Clallam County	Elwha Beach east	48.15077	-123.557162
Island County	Cornet Bay	48.399448	-122.624996
Island County	Hidden Beach	48.124601	-122.559891
Island County	Hoypus Point	48.411366	-122.608735
Island County	Seahorse Siesta	48.043665	-122.422579
Island County	Sunlight Shores	47.985879	-122.446826
Island County	Glendale	47.93884	-122.35793
Island County	Maple Grove	48.25276	-122.51773
Jefferson County	Adelma Beach	48.043917	-122.826761
Jefferson County	Fort Townsend State Park	48.07791	-122.788276
Jefferson	Dabob Bay: Siri's Cove	47.80916	-122.792777
Whatcom County	Marine Park	48.71914	-122.516216
Whatcom County	Little Squalicum Beach	48.76452	-122.517101

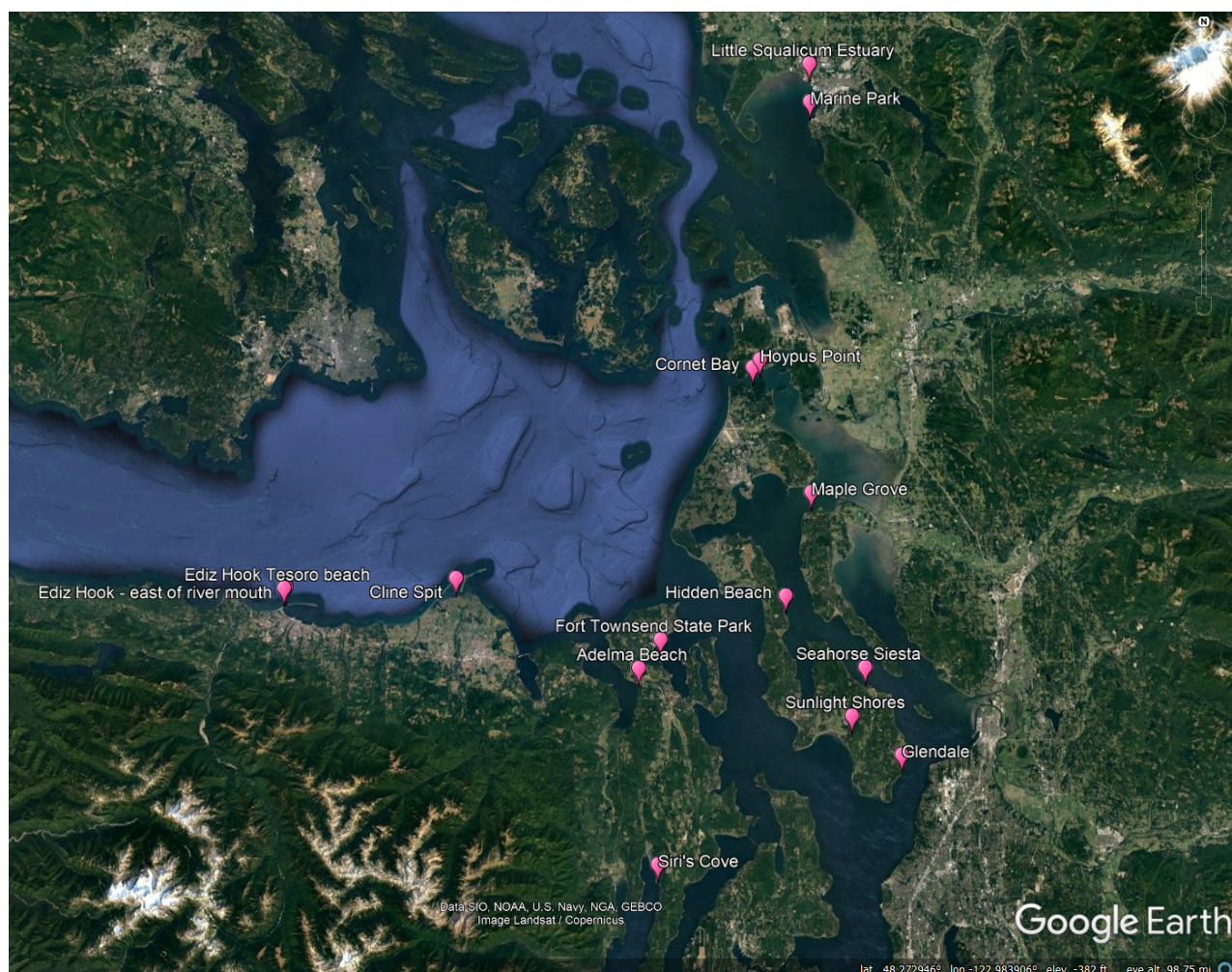


Figure 1: Google Earth map of forage fish sampling sites.

5.0 Organization and Schedule

5.1 Key individuals and their responsibilities

Each MRC is responsible for coordinating monthly sampling at select sites in their county. The samples collected are transferred to WDFW staff who carry out laboratory analysis and quality assurance steps. The NWSC coordinate with WDFW and MRCs to ensure volunteers have enough materials and training to conduct routine sampling. Key staff with WDFW, NWSC, and MRCs are identified below in Table 1.

Table 1: Organization of project staff

Role	Position Who is Responsible	As of 1/1/2021
Coordinates with MRC PMs and WDFW staff to provide	NWSC Marine Program Manager	Dana Oster

supplies/materials and training to volunteers.		
Coordinates data analysis, supplies for volunteers, training, and on the beach sampling practice/refreshers.	Washington Department of Fish and Wildlife	Lisa Hillier
Island MRC		
Manages Island County sampling needs, coordinates with MRC project lead, manages volunteer coordination, receives samples and transfers to WDFW, and tracks training needs and coordinates with NWSC and WDFW. Creates county reports and manages data.	MRC PM	Anna Toledo, Ann Prusha
Sets sampling dates, manages volunteer coordination, leads sampling collection following protocols and QAPP.	MRC project lead	Ann Prusha
Assist MRC project lead with sampling.	Island County volunteers	MRC volunteers
Clallam MRC		
Manages Clallam County sampling needs, coordinates with MRC project lead, manages volunteer coordination, receives samples and transfers to WDFW, and tracks training needs and coordinates with NWSC and WDFW. Creates county reports and manages data.	MRC PM	Cathy Lear
Sets sampling dates, manages volunteer coordination, leads sampling collection following protocols and QAPP.	MRC project lead	Tim Cochnauer
Assist MRC project lead with sampling.	Clallam County volunteers and project intern	MRC volunteers
Whatcom MRC		
Manages Whatcom County sampling needs, coordinates with MRC project lead, manages volunteer coordination, receives samples and transfers to WDFW, and tracks training needs and coordinates with NWSC and	MRC PM	Austin Rose

WDFW. Creates county reports and manages data.		
Sets sampling dates, manages volunteer coordination, leads sampling collection following protocols and QAPP.	MRC project lead	Rachel Arnold, Maya Garber Yonts
Assist MRC project lead with sampling.	Whatcom County volunteers and program intern	MRC volunteers
Jefferson MRC		
Manages Jefferson County sampling needs, coordinates with MRC project lead, manages volunteer coordination, receives samples and transfers to WDFW, and tracks training needs and coordinates with NWSC and WDFW. Creates county reports and manages data.	MRC PM	Monica Montgomery
Sets sampling dates, manages volunteer coordination, leads sampling collection following protocols and QAPP.	MRC project lead	Jeff Taylor (Adelma), Sarah Fiskén (Siri's Cove, Dabob Bay)
Assist MRC project lead with sampling.	Jefferson County volunteers	MRC volunteers

MRC: Marine Resources Committee

NWSC: Northwest Straits Commission

WDFW: Washington Department of Fish and Wildlife

PM: Project manager