NOAA FISHERIES
NATIONAL MARINE FISHERIES SERVICE

Authorizations and Permits for Protected Species (APPS)

File #: 21468
Title: Smith and Bybee Wetlands Channel Management R

Applicant Information

Name: Troy Brandt
Title: Principal, Fisheries biologist
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Project Information

File Number: 21468
Application Status: **Application Complete - Issued**
Project Title: Smith and Bybee Wetlands Channel Management Restoration Project
Project Status: New
Previous Federal or State Permit:
Permit Requested: • Oregon Scientific Taking Permit for Fish and Marine and Freshwater Invertebrates
Where will activities occur? Oregon (including Columbia River and offshore waters)
State department of fish and game/wildlife: N/A

Research Timeframe:	**Start:** 07/18/2017 **End:** 09/15/2017
Sampling Season/Project Duration:	The rescue/salvage will occur during the 2017 in-water work window (June 15 to September 15).
Project Type:	Rescue/Salvage

Project Description

Purpose: The Smith and Bybee Wetlands Channel Management project is located in north Portland, Oregon. The project involves removing sediment that accumulated in a connector channel between wetlands and creation of a planting area for native trees and shrubs.

This project goal is to restore connectivity between Bybee and Smith lakes and the ability to draw down wetlands in summer. In addition to sediment removal in the channel bottom, removal of a pinch point created by a derelict road crossing is included. Sediment removed from the channel will be placed nearby to raise elevation of an emergent wetland to support forested wetland habitat and increase habitat patch size for migratory and nesting birds.

Description: The existing site is a lake connected to the Columbia Slough via a sediment-filled channel that ends at a control structure, because of sediment deposition, the lake level does no respond to the elevation changes at the control structure. The proposed site improvements include removal of excess sediment in the channel which should allow Bybee Lake and Smith Lake to be responsive to the control structure at the end of the channel. Excavated materials from the channel will be re-used on-site to construct additional forested wetland habitat at the edge of Smith Lake.

Construction will include:

1. Construction of temporary access path along Smith channel. Temporary access path will include 4,250 square yards of gravel paths.

2. Excavation of 7,100 cubic yards of sediment from Smith channel.

3. Construction of forested wetland habitat.

4. Removal of the 4,250 square yards of temporary access path.

Supplemental Information

Methods: The project will include constructing temporary access routes to the connector channel, excavating sediment from the connector channel, and removing the temporary access routes. Disturbed areas will be stabilized and revegetated with native grass species.

Project area dewatering and work area isolation will include the following elements.

1) Install temporary dam on the downstream side of the existing water control structure to isolate the work area from tidal influence.

2) Install a block net or hardware cloth fencing upstream of the water control structure to exclude aquatic organisms from entering the pumping area. Aquatic organisms inside of the exclusion area will be netted and removed to an active waterbody when the pump is activated.

3) Install a temporary pumping station on the upstream side of the existing water control structure to dewater any remaining water in the connector channel. The connector channel, Smith Lake, and Bybee Lake are seasonally inundated and minimal water is anticipated to be in the system during project construction.

3) An up to ten person team (team size will depend on drawdown area) will walk the connector channel, Smith Lake and Bybee Lake perimeters during water drawdown. Aquatic organisms will be netted with hand nets and temporary placed in 5 gallon buckets carried by team members. Aquatic organisms will be periodically transferred to an active waterbody and released. Release locations will be varied to minimize the aquatic organism crowding at the release location.

4) At the end of the connector channel excavation, the pumping station will be removed followed by the aquatic organism exclusion net/fence. The temporary dam on the downstream side of the water control structure will then be removed.

Lethal Take:

Euthanization Protocol per ODFW request:
Will discuss with Elaine if Metro is on-board with euthanizing introduced species. If Metro agrees, we will plan to overdose fish with either MS-222 (provided by ODFW) or another approved aesthetic. Euthanized fish will be properly disposed of off-site.

Anticipated Effects on Animals:

Aquatic organisms inhabiting the connector channel, Smith Lake, and Bybee Lake may be affected during the drawdown. Aquatic organisms that are not visible to the salvage team will perish. The salvage team will use hand nets and periodically relocate aquatic organisms to the nearest active channel to minimize effects on the organisms.

Measures to Minimize Effects:

The following measures will be taken to minimize negative effects.

1) Isolate the work area from downstream active water by installing an earthen dam downstream of the water control structure.

2) Install an aquatic organism exclusion fence or net upstream of the water control structure to eliminate aquatic organism entrance into the pumping station area located upstream from the existing water control structure.

3) Install a pumping station between the existing water control structure and the exclusion fence/net. to drawdown water and concentrate aquatic organisms where they can then be netted, transported, and released into active waterbodies.

4) Salvage team will follow the water drawdown from upstream to downstream to net and transport aquatic organisms to active waterbodies. The drawdown will be slowed or paused to ensure the salvage team is keeping up with the drawdown rate and aquatic organism salvage.

At ODFW request, reconnaissance sampling will occur:
RDG will complete a reconnaissance seining effort to determine if there are juvenile salmonids in the Smith Lake connector channel. We'll use a 1/8" mesh seine to

sample a few areas in the channel. If we net salmonids, we'll take a picture to document the fish and the fish will be released. We will send the photos to you for documentation. We will then develop a protocol with you for dealing with salmonids that are encountered during the salvage.

We will also use a backpack electrofisher to determine if there are lamprey ammocoetes in the connector channel.

Disposition of Tissues: Not Applicable

Public Availability of Product/Publications: Information on the Smith Bybee Wetlands Natural Area is located here: http://www.oregonmetro.gov/parks/smith-and-bybee-wetlands-natural-area

Metro can be contacted for additional project information. The metro contact Elaine Stewart may be contacted at 503-797-1700.

Biologist Comments

Date	From	Comments
07/13/2017	Fish Research	Todd said they are good to go after coordination call yesterday and once Troy and HH update species in permit. Reconnaissance Sampling RDG will complete a reconnaissance seining effort to determine if there are juvenile salmonids in the Smith Lake connector channel. We'll use a 1/8" mesh seine to sample a few areas in the channel. If we net salmonids, we'll take a picture to document the fish and the fish will be released. We will send the photos to you for documentation. We will then develop a protocol with you for dealing with salmonids that are encountered during the salvage. We will also use a backpack electrofisher to determine if there are lamprey ammocoetes in the connector channel. Euthanization Protocol You will discuss with Elaine if Metro is on-board with euthanizing introduced species. If Metro agrees, we will plan to overdose fish with either MS-222 (provided by ODFW), clove oil, or another approved aesthetic. Euthanized fish will be properly disposed of off-site.

Federal Information

Federal Agency	Type	Authorization Number and Title	Date Signed	Expiration Date	Listing Units/Stocks Covered	Comments

National Marine Fisheries Service (NMFS)	Section 7 Consultation (Biological Opinion)	SLOPES V Restoration biological opinion	03/19/2013		Chinook Salmon, Snake River fall-run (NMFS Threatened);Chinook Salmon, Snake River spring/summer-run (NMFS Threatened);Sockeye Salmon, Snake River (NMFS Endangered);Steelhead, Upper Columbia River (NMFS Threatened);Steelhead, Snake River Basin (NMFS Threatened);Steelhead, Upper Willamette River (NMFS Threatened);Chinook Salmon, Lower Columbia River (NMFS Threatened);Chinook Salmon, Upper Columbia River spring-run (NMFS Endangered);Chum Salmon, Columbia River (NMFS Threatened)	approval attached to application

Location/Take Information

Freshwater Location

Research Area: Pacific Ocean **State:** OR **Sub Basin (4th Field HUC):** Lower Willamette **Stream Name:** Smith Lake and Bybee Lake - Columbia Slough **Township:** 2N **Range:** 1E
Section: 31 **Latitude:** 45.611169 **Longitude:** -122.732408
UTM Zone: 10N **Easting:** 520864 **Northing:** 5050882

Sale in Oregon of species taken: None
Location Description: The Smith-Bybee Wetlands Natural Area is located between the Columbia Slough, Willamette River, and the Columbia River near Hayden Island o the northwest side of Portland. The property is managed by Metro.

Take Information

Line	Ver	Species	Listing Unit/Stock	Production /Origin	Life Stage	Sex	Expected Take	Indirect Mort	Take Action	Observe /Collect Method	Procedure	Transport Record	Begin Date	End Date
1		Stickleback, Threespine	NA	Natural	Unknown	Unknown	100	1	Capture/Handle/Release Fish	Hand and/or Dip Net		N/A	7/18/2017	9/15/2017
2		Carp, Common	NA	Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Hand and/or Dip Net		N/A	7/18/2017	9/15/2017
3		Bass, Largemouth	NA	Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Hand and/or Dip Net		N/A	7/18/2017	9/15/2017
4		Crappie, Black	NA	Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Hand and/or Dip Net		N/A	7/18/2017	9/15/2017
5		Bullhead, Brown	NA	Natural	Unknown	Unknown	1000	0	Intentional (Directed) Mortality	Hand and/or Dip Net		N/A	7/18/2017	9/15/2017
6		Perch, Yellow	NA	Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Hand and/or Dip Net		N/A	7/18/2017	9/15/2017
7		Bluegill	NA	Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Hand and/or Dip Net		N/A	7/18/2017	9/15/2017

8		Mosquitofish	NA	Natural	Unknown	Unknown	1000	0	Intentional (Directed) Mortality	Hand and/or Dip Net		N/A	7/18/2017	9/15/2017
9		Weatherfish, oriental	NA	Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Hand and/or Dip Net		N/A	7/18/2017	9/15/2017
10		Kilifish, Banded	NA	Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Hand and/or Dip Net		N/A	7/18/2017	9/15/2017
11		Goby, Amur	NA	Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Hand and/or Dip Net		N/A	7/18/2017	9/15/2017
12		Crayfish, other	NA	N/A	Adult	Unknown	100	0	Capture/Handle/Release Fish	Hand and/or Dip Net		N/A	7/18/2017	9/15/2017
13		Stickleback, Threespine		Natural	Unknown	Unknown	100	1	Capture/Handle/Release Fish	Seine, Beach		N/A	7/18/2017	9/15/2017
14		Carp, Common		Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Seine, Beach		N/A	7/18/2017	9/15/2017
15		Bass, Largemouth		Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Seine, Beach		N/A	7/18/2017	9/15/2017
16		Crappie, Black		Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Seine, Beach		N/A	7/18/2017	9/15/2017
17		Bullhead, Brown		Natural	Unknown	Unknown	1000	0	Intentional (Directed) Mortality	Seine, Beach		N/A	7/18/2017	9/15/2017
18		Perch, Yellow		Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Seine, Beach		N/A	7/18/2017	9/15/2017
19		Bluegill		Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Seine, Beach		N/A	7/18/2017	9/15/2017
20		Mosquitofish		Natural	Unknown	Unknown	1000	0	Intentional (Directed) Mortality	Seine, Beach		N/A	7/18/2017	9/15/2017
21		Weatherfish, oriental		Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Seine, Beach		N/A	7/18/2017	9/15/2017
22		Kilifish, Banded		Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Seine, Beach		N/A	7/18/2017	9/15/2017
23		Goby, Amur		Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Seine, Beach		N/A	7/18/2017	9/15/2017
24		Crayfish, other			Adult	Unknown	100	0	Capture/Handle/Release Fish	Seine, Beach		N/A	7/18/2017	9/15/2017

25		Lamprey, Western Brook	NA	Natural	Juvenile	Unknown	100	3	Capture/Handle/Release Fish	Electrofishing, Backpack		N/A	7/18/2017	9/15/2017
26		Lamprey, Pacific	NA	Natural	Juvenile	Unknown	100	3	Capture/Handle/Release Fish	Electrofishing, Backpack		N/A	7/18/2017	9/15/2017
27		Stickleback, Threespine		Natural	Unknown	Unknown	100	3	Capture/Handle/Release Fish	Electrofishing, Backpack		N/A	7/18/2017	9/15/2017
28		Carp, Common		Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Electrofishing, Backpack		N/A	7/18/2017	9/15/2017
29		Bass, Largemouth		Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Electrofishing, Backpack		N/A	7/18/2017	9/15/2017
30		Crappie, Black		Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Electrofishing, Backpack		N/A	7/18/2017	9/15/2017
31		Bullhead, Brown		Natural	Unknown	Unknown	1000	0	Intentional (Directed) Mortality	Electrofishing, Backpack		N/A	7/18/2017	9/15/2017
32		Perch, Yellow		Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Electrofishing, Backpack		N/A	7/18/2017	9/15/2017
33		Bluegill		Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Electrofishing, Backpack		N/A	7/18/2017	9/15/2017
34		Mosquitofish		Natural	Unknown	Unknown	1000	0	Intentional (Directed) Mortality	Electrofishing, Backpack		N/A	7/18/2017	9/15/2017
35		Weatherfish, oriental		Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Electrofishing, Backpack		N/A	7/18/2017	9/15/2017
36		Kilifish, Banded		Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Electrofishing, Backpack		N/A	7/18/2017	9/15/2017
37		Goby, Amur		Natural	Unknown	Unknown	100	0	Intentional (Directed) Mortality	Electrofishing, Backpack		N/A	7/18/2017	9/15/2017
38		Crayfish, other			Adult	Unknown	100	3	Capture/Handle/Release Fish	Electrofishing, Backpack		N/A	7/18/2017	9/15/2017

Project Contacts

Primary Contact: Troy Brandt

Principal Investigator: Troy Brandt

Other Personnel:

Name	Role(s)
Peter Gruendike	Co-Investigator

Attachments

Application Archive - P21468T14Issued.pdf (Added Jul 18, 2017)

Federal Authorization - P21468T22017_04_11_SmithBybeeLakes_ApprovReq_201700120.pdf (Added Jul 13, 2017)

Project Description - P21468T1Smith-BybeeWaterTemperaturesandPhotos.pdf (Added Jul 13, 2017)

Project Description - P21468T1SmithBybee-SignedPlans_11x17_17_0615_LR.pdf (Added Jul 13, 2017)

Status

Application Status: Application Complete
Date Submitted: July 10, 2017
Date Completed: July 18, 2017
Last Date Archived: July 18, 2017

• Oregon Scientific Taking Permit for Fish and Marine and Freshwater Invertebrates

Current Status: Issued **Status Date:** July 18, 2017
Date State Approved: July 18, 2017
Expire Date: September 15, 2017

Modification Requests

This section is currently empty.

Reports

Report Required

Nbr	Report Type	Report Period		Date Due	Status	Date Received
		Start Date	End Date			
1	Annual-Year End	01/01/2017	12/31/2017	12/31/2017	N/A	