

# Draft Compatibility Determination

## Title

Draft Compatibility Determination for Research, Three Arch Rocks National Wildlife Refuge and Three Arch Rocks Wilderness

## Refuge Use Category

Research and Surveys

## Refuge Use Type(s)

Research

## Refuge

Three Arch Rocks National Wildlife Refuge

## Refuge Purpose(s) and Establishing and Acquisition Authority(ies)

“. . . as a preserve and breeding ground for native birds and animals.” E.O. 699, October 14, 1907.

“A wilderness. . . an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain. An area. . . without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions” Wilderness Act of 1964 (PL 88-577). Three Arch Rocks NWR was accorded wilderness status on October 23, 1970, by P.L. 91-504. Covers all of Three Arch Rocks NWR.

## National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System, otherwise known as Refuge System, is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans (Pub. L. 105-57; 111 Stat. 1252).

## Description of Use

Is this an existing use?

Yes. This compatibility determination reviews and replaces the 2009 compatibility

determination for Research which was prepared concurrently with the Comprehensive Conservation Plan (CCP) for the Oregon Islands, Three Arch Rocks, and Cape Meares National Wildlife Refuges (USFWS 2009).

What is the use?

**Research.** Planned, organized, and systematic investigation of a scientific nature conducted by non-Service personnel or their authorized agent(s).

Is the use a priority public use?

No

Where would the use be conducted?

Research would be allowed on the Refuge, as requested by outside entities, where it is determined to be compatible with refuge management of natural resources. This will be determined by refuge staff on a case-by-case basis as requests are received in the form of a proposal and supporting documentation. Research could occur throughout the Refuge if it is found to be compatible.

When would the use be conducted?

The timing, frequency, and duration of research on the Refuge would be project specific and will vary depending upon the nature and scope of the proposed project. Research may occur year-round or may be limited to certain seasons to protect nesting seabirds.

How would the use be conducted?

**Types of research.** The refuge staff receive periodic requests from non-Service entities (*e.g.*, universities, State or territorial agencies, other Federal agencies, nongovernmental organizations) to conduct research on refuge lands. Research requests can involve a wide range of subjects covering natural and cultural resources, as well as public-use management issues, and may be conducted using a wide variety of methods; for example, basic absence/presence surveys, collection of animals or plants for identification, studies of habitat use and life-history requirements for specific species/species groups, studies of practical methods for habitat restoration, investigations into the extent and severity of environmental contaminants, techniques to control or eradicate pest species, studies of effects of climate change on environmental conditions and associated habitat/wildlife response, identification and analyses of paleontological specimens, studies related to wilderness character, modelling of wildlife populations, bioprospecting, and assessing response of habitat/wildlife to disturbance from public uses. Projects may be species-specific, habitat-specific, or refuge-specific, or they may evaluate the relative contribution of the refuge lands to larger landscapes (*e.g.*, ecoregion, region, flyway, national,

international), issues, and trends.

**Application Process.** At least six months before the initiation of any fieldwork, the project investigator(s) must submit a detailed project proposal using the *Research and Monitoring Special Use Permit* application (FWS Form 3-1383-R) and all appropriate or required supporting documentation (*e.g.*, state and federal permits, proof of liability insurance, *etc.*). A proposal template is available from the Refuge Manager on request.

**Proposal review; selection criteria.** Project proposals will be reviewed by refuge staff and others, as needed, to assess the potential impacts (short-term, long-term, and cumulative) relative to benefits of the proposed investigation to refuge management issues and understanding of species, habitats, and natural systems. The proposal review process will form the primary basis for allowing or denying a specific project. Special Use Permits (SUPs) will not be issued for projects that result in a determination of unacceptable refuge impacts.

Priority would be given to research that supports refuge purposes, goals and objectives. This would include, for example, studies that contribute to the enhancement, protection, use, preservation, and management of native refuge wildlife populations and their habitats, including the wilderness resource. Research that can be done outside of refuge wilderness areas are less likely to be approved.

**SUP issuance; stipulations.** The Refuge Manager will issue a SUP for accepted projects that includes stipulations (terms and conditions) required to avoid and/or minimize potential impacts to refuge resources, conflicts with other public use activities, and refuge management activities. The SUP stipulations will ensure that accepted projects contribute to the enhancement, protection, conservation, and management of native wildlife populations and their habitats, or wilderness or cultural resources on the Refuge. As a result, the accepted projects would help fulfill the Refuge purpose(s), contribute to the mission of the Refuge System, and maintain the biological integrity, diversity, and environmental health of the Refuge.

**Measures to minimize spread of invasive species.** Spread of invasive plants, animals, or pathogens would be minimized or eliminated by requiring proper cleaning, sanitizing, and quarantine of equipment and clothing, as described in the Refuge's biosecurity protocols. If there is a significant risk of the spread of invasive species or pathogens despite the implementation of preventative measures, the project proposal must include a restoration or mitigation plan to be permitted on the Refuge.

**Permit requirements.** Investigator(s) are required to obtain the appropriate State, territorial, and/or Federal permits to ensure that there would be minimal impacts to fish, wildlife, plants, and their habitats. Future projects that are outside the scope of the CCP may require additional NEPA documentation and compliance. For example, Section 7 consultation under the Endangered Species Act (16 U.S.C. 1531-1544, 87 Stat. 884, as amended Public Law 93-205) would be required for activities that may affect a federally listed species and/or critical habitat. SUPs would be issued only for projects

with “no effect” or “not likely to adversely affect” determinations for listed species and critical habitat.

A minimum requirement analysis (MRA) must be prepared for any research requested in designated wilderness consistent with FWS Policy and must adhere to the requirements of the Wilderness Act of 1964 (16 U.S.C. 1131-1136).

### Why is this use being proposed or reevaluated?

Wildlife and habitat conservation and management on the Refuge should be based upon statistically viable scientific research combined with long-term monitoring. The Service’s Research and Management Studies (4 RM 6) and Appropriate Refuge Uses (603 FW 1.10D(4)) policies indicate priority for scientific investigatory studies that contribute to the enhancement, protection, use, preservation, and management of native wildlife populations and their habitat, as well as their natural diversity. Thus, research that contributes toward achievement of refuge-specific resource management goals and objectives, where applicable, or elucidating the status and trends of its fish, wildlife, plants, and habitats would be given a higher priority over other requests.

The combination of stipulations identified below, and conditions included in any SUP(s), will ensure proposed projects contribute to the enhancement, protection, use, preservation, conservation, and management of native wildlife populations and their habitats on the Refuge. As a result, these projects will help fulfill the Refuge purposes, contribute to the mission of the NWRS, and maintain the biological integrity, diversity, and environmental health of the Refuge.

Research at Three Arch Rocks NWR was previously determined to be compatible (USFWS 2009). Research is being re-evaluated due to the 10-year renewal period ending (603 FW 2.11 H.).

### **Availability of Resources**

Refuge staff responsibilities for oversight of research conducted by non-Service entities and their assigned agent(s) would include reviewing proposals, preparing SUPs, addressing other applicable compliance (*e.g.*, Section 7 of the Endangered Species Act of 1973, Section 106 of the National Historic Preservation Act, NEPA), and monitoring project implementation to ensure that impacts remain within acceptable levels. Additional administrative, logistical, and operational support may also be provided depending on each permitted project. Generally, the Refuge receives only one or two requests to conduct research annually, so only one or two research projects are being conducted on the Refuge in any given year at any one time. One-time costs to evaluate research proposals and issue SUPs at the current level of use is approximately \$1,500 annually. Recurring annual expenses to administer and manage ongoing research projects is estimated at \$1,500. The Refuge currently has staffing

and funding in its general operating budget to administratively support and monitor research at levels anticipated to take place on refuge lands. A substantial increase to the number of projects may create the need for additional resources to administer the use. Any additional costs to administer the use above those covered under the refuge's general operating budget must be offset by the investigator(s), sponsoring agency, or organization.

### **Anticipated Impacts of the Use**

This CD includes the written analyses of the environmental consequences on a resource only when the impacts on that resource could be more than negligible and, therefore, considered an "affected resource." Soils, Air, water, cultural resources, and socioeconomic resources will not be more than negligibly impacted by the action and have been dismissed from further analyses.

#### **Potential impacts of a proposed use on the Refuge's purpose(s) and the Refuge System mission**

Priority would be given to research that supports refuge purposes, goals and objectives. The selection criteria, along with the combination of stipulations (terms and conditions) included in any SUPs will ensure that proposed projects contribute to the enhancement, protection, conservation, and management of native wildlife populations and their habitats on the Refuge. As a result, these projects will help fulfill the Refuge purposes, contribute to the Mission of the NWRS, and maintain the biological integrity, diversity, and environmental health of the Refuge.

If project methods impact or conflict with refuge-specific resources, priority wildlife-dependent public uses, other high-priority research, or refuge habitat and wildlife management programs or activities, the project proposal will only be accepted, and SUP issued, when the project clearly demonstrates a scientific finding that would contribute to resource management and cannot be conducted off refuge lands. The investigator(s) must identify methods/strategies in advance required to minimize or eliminate the potential impact(s) and conflict(s). If unacceptable impacts cannot be avoided, then a SUP would not be issued. Because MRAs are required before SUPs would be issued for research that have potential wilderness impacts, research would have negligible adverse impacts to wilderness values.

Projects that represent economic use of the natural resources of any national wildlife refuge (*e.g.*, bioprospecting), in accordance with 16 U.S.C. 715s, must contribute to the achievement of the Refuge purposes or the Refuge System mission to be compatible (50 C.F.R. 29.1).

## Short-term impacts

Impacts would be project- and site-specific and would vary depending upon nature and scope of the fieldwork. Depending on the project, migratory birds, native birds, or fish and wildlife may be impacted by the actions. Some research projects may directly interact with native species and their habitat, potentially causing behavioral changes, mortality, or habitat alteration. Research not directly associated with native species may also cause disturbance through the presence of researchers and equipment or the alteration of habitat. However, these effects would be temporary and short-term. Monitoring of the project by Refuge staff will prevent unacceptable or irreversible impacts to fish, wildlife, plants, and their habitats.

Data collection techniques would generally result in minimal animal mortality or disturbance, impacts to habitat, no introduction of contaminants, and minimal risk of introduction of non-native species. Research involving the collection of biotic (*e.g.*, plants or animals) or abiotic (*e.g.*, soil, water) samples, or requiring intensive ground-based data or sample collection would have short-term impacts. To reduce impacts, the project proposal must specify that the minimum number of samples (*e.g.*, water, soils, vegetative litter, plants, macroinvertebrates, vertebrates) would be collected for identification and/or experimentation and statistical analysis. Where possible, researchers would coordinate and share collections to reduce sampling needed for multiple projects.

There could be localized and temporary effects from vegetation trampling, collecting of soil and plant samples, trapping and handling of wildlife, or general disturbance of individual animals. Impacts may also occur from infrastructure necessary to support a project (*e.g.*, transects or plot markers, enclosure devices, monitoring equipment, solar panels to power unattended monitoring equipment). Some level of disturbance is expected with these projects, especially if investigator(s) enter areas closed to the public and collect samples or handle wildlife. However, wildlife disturbance (including altered behavior) would usually be localized and temporary in nature.

Although the spread of invasive plants, animals, or pathogens is possible from ground disturbance and/or transportation of project equipment and personnel, this would be minimized or eliminated by requiring proper cleaning, sanitizing, and quarantine of investigator equipment and clothing, as described in the Refuge's biosecurity protocols.

## Long-term impacts

As noted above, the stipulations (terms and conditions) of SUPs would be designed to minimize the risk of long-term negative impacts, and SUPs would not be issued for proposed projects likely to have long-term negative impacts to refuge resources. Use of the Refuge to conduct research would generally provide information that would benefit fish, wildlife, plants, and their habitats. Scientific findings gained through approved projects provide important information regarding life-history needs of

species and species groups, as well as identify or refine management actions to achieve resource management objectives in refuge management plans (especially CCPs). Reducing uncertainty regarding wildlife and habitat responses to refuge management actions in order to achieve desired outcomes reflected in resource management objectives is essential for adaptive management in accordance with the Service's Adaptive Management Implementation Policy (522 DM 1).

## **Public Review and Comment**

The draft compatibility determination will be available for public review and comment for 14 days. The public will be made aware of this comment opportunity through our social media outlets and letters to potentially interested people such as neighbors and partner agencies. A hard copy of this document will be posted at the Refuge Headquarters (2127 SE Marine Science Drive, Newport, OR, 97365-5258). It will be made available electronically on the Refuge website:

<https://www.fws.gov/refuge/three-arch-rocks>.

Please let us know if you need the documents in an alternative format. Concerns expressed during the public comment period will be addressed in the final Compatibility Determination.

## **Determination**

Is the use compatible?

Yes

### **Stipulations Necessary to Ensure Compatibility**

1. Each proposed project would require one or more SUPs. Annual or other short-term SUPs are preferred; however, some permits would be for a longer period, if needed, to allow completion of the project. Every SUP would have a definite termination date in accordance with 5 RM 17.11. Renewals would be subject to Refuge Manager review and approval based on timely submission of, and content in, progress reports, compliance with SUP stipulations, and required permits.
2. A minimum requirement analysis (MRA) must be prepared for any research requested in designated wilderness consistent with FWS Policy and must adhere to the requirements of the Wilderness Act of 1964 (16 U.S.C. 1131-1136).
3. Projects will adhere to scientifically defensible protocols for data collection, where available and applicable. Projects will address data management planning requirements as specified in 274 FW 1.
4. Project investigators must submit a study proposal at least six months in advance of proposed initiation for the Refuge staff to have adequate time to

- review the proposed project. For projects requiring other compliance (*e.g.*, Section 7 consultation), study proposals may need additional processing time.
5. Investigators must possess and comply with conditions of State, territorial, and/or Federal permits for their projects.
  6. If unacceptable impacts to natural resources, or conflicts arise or are documented by Refuge staff, then the Refuge Manager can suspend, modify conditions of, or terminate an ongoing project already permitted by SUP(s) on the Refuge.
  7. Progress reports are required at least annually for multiple-year projects. The minimum required elements for a progress report will be provided to investigators by the Refuge Manager or designee.
  8. Final reports will be due one year after completion of the project unless negotiated otherwise with the Refuge Manager.
  9. Continuation of existing projects will require prior written approval by the Refuge Manager.
  10. Refuge staff will be given the opportunity to review draft manuscript(s) from the project before being submitted to a scientific journal(s) for consideration of publication.
  11. Refuge staff will be provided with copies (reprints) of all publications resulting from a refuge project.
  12. Refuge staff will be provided with copies of raw data (preferably electronic database format) at the conclusion of the project.
  13. Upon completion of the project, or annually, all equipment and markers (unless required for long-term projects) must be removed, and sites must be restored to the Refuge Manager's satisfaction. Conditions for clean-up and removal of equipment and physical markers will be stipulated in the SUP(s).
  14. All samples collected on the Refuge are the property of the Service even while in the possession of the investigator(s). Any future work with previously collected samples not clearly identified in the project proposal will require submission of a subsequent proposal for review and approval. In addition, a new SUP will be required for additional project work. For samples or specimens to be stored at other facilities (*e.g.*, museums), a Memorandum of Understanding (MOU) will be required.
  15. Sampling equipment, as well as investigator(s) clothing, vehicles, and equipment (*e.g.*, ATVs, boats, monitoring devices) will be thoroughly cleaned (free of dirt and plant material) before being allowed for use on refuge lands to prevent the introduction and/or spread of pests or pathogens. Where necessary, sanitizing and quarantine methods specified in the biosecurity protocol will be used.



16. The Refuge System, the specific refuge, and the names of refuge staff and other Service personnel that supported or contributed to the project will be appropriately cited and acknowledged in all written and oral presentations resulting from projects on refuge lands.
17. At any time, Refuge staff may accompany investigator(s) in the field.
18. Investigator(s) and support staff will follow all refuge-specific regulations that specify access and travel on the Refuge.
19. A Section 7 consultation under the Endangered Species Act would be required for research activities that may affect a federally threatened, endangered, or proposed species.
20. Compliance with Section 106 of the National Historic Preservation Act is required for all projects.
21. Research that does not involve birds generally will only be allowed outside of the breeding season of avian species using the specific island(s), unless it can be demonstrated that there likely will be no impact to breeding seabirds, or the results of the proposed project are dependent upon species or individuals being present at the time of the project. If a research project can only be conducted during the breeding season, such projects will only be permitted where there are specific protocols to minimize disturbance.

## **Justification**

The stipulations outlined above would help ensure that the use is compatible at Three Arch Rocks National Wildlife Refuge. Research, as outlined in this compatibility determination, would not conflict with the national policy to maintain the biological diversity, integrity, and environmental health of the Refuge. Based on available science and best professional judgement, the Service has determined that research at Three Arch Rocks National Wildlife Refuge, in accordance with the minimum stipulations provided here, would not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or the purpose of the Three Arch Rocks National Wildlife Refuge. Rather, appropriate and compatible research contributes to the Refuge's purpose by providing valuable information and data to information management.

## **Signature of Determination**

Refuge Manager Signature and Date

## **Signature of Concurrence**

Assistant Regional Director Signature and Date

## **Mandatory Reevaluation Date**

2033

## **Literature Cited/References**

U.S. Fish and Wildlife Service. May 2009. Oregon Islands, Three Arch Rocks, and Cape Meares National Wildlife Refuges: Comprehensive Conservation Plan and Wilderness Stewardship Plan. <https://ecos.fws.gov/ServCat/DownloadFile/1507>

## Attachment 1

### FORMAT FOR PROPOSALS TO CONDUCT RESEARCH OR LONG-TERM ECOLOGICAL STUDY

#### Title

#### Principal Investigator(s) and background

Provide the name(s) and affiliation(s) of all principal investigator(s) that will be responsible for implementation of the research and/or long-term monitoring described in the proposal. In addition, provide a brief description of expertise for principal investigator(s) germane to work described in the proposal.

#### Background and justification

In a narrative format, describe the following as applicable:

- The conservation issue (*e.g.*, decline in *Pisonia* rainforest) and/or knowledge gap regarding ecological function that currently exists with any available background information.
- Benefit of research/study findings (*e.g.*, management implications) to resources associated with refuge purposes.
- Potential consequences if the conservation issue and/or knowledge gap regarding ecological function is not addressed.

#### Objectives

Provide detailed objective(s) to be evaluated by the proposed research or study.

#### Methods and Material

Provide a detailed description of the methods and materials associated with field work to be conducted for the research and/or ecological study. Methods should include the following:

- study area(s)
- number of samples
- sampling dates and locations
- sampling techniques
- data analyses including **statistical tests** and **significance levels**
- proposed mitigation measures to reduce wildlife disturbance and minimize introduction of invasive species/contaminants

Previously published methods should be cited without explanation, whereas new or modified techniques should be described in detail. Include number of personnel as well as all facilities and equipment (*e.g.*, vehicles, boats, structures, markers) required to collect samples/data. Provide a

clear description of the relationships among study objectives, field methods, and statistical analyses.

### **Permits**

Identify all state and federal permits required if applicable. If appropriate, assess the impact on the species population if animals or eggs are to be sacrificed or collected. Note any official status of the species involved (*e.g.*, threatened or endangered).

### **Compatibility and Section 7 Assessments**

For a research and/or long-term ecological monitoring project to be compatible, it must not materially interfere with or detract from refuge purposes or System mission. Describe potential impacts to threatened or endangered species as well as other refuge plants, wildlife, and fish species that could result from the implementation of project activities on the Refuge if applicable. Consider the cumulative impacts associated with this project in relationship to other ongoing or proposed research and/or long-term monitoring.

### **Section 106 of the National Historic Preservation Act**

Compliance with Section 106 of the National Historic Preservation Act is required for all projects.

### **Animal Welfare Plan**

If appropriate, attach a copy of animal welfare plans that are required by the supporting research affiliate.

### **Partnerships and Funding Sources**

List other participating institutions, agencies, organizations, or individuals as well as the nature and magnitude of their cooperative involvement (*e.g.*, funding, equipment, personnel).

### **Project Schedule**

Provide estimated initiation and completion dates for field sampling, laboratory work, data analyses, and report/manuscript preparation. If the study is divided into phases to be accomplished separately, provide initiation and completion dates for each phase.

### **Reports and Raw Data**

Establish a schedule for annual progress and final reports; include adequate time for peer review for the final report/manuscript. Copies of annual progress reports must be submitted to the Refuge Manager by January 1 during each year that the study is in progress. Draft reports/manuscripts should be submitted to the Refuge Manager for review prior to submission

for consideration of publication. At the conclusion of a research study (manuscript accepted for publication), an electronic copy of the data (*e.g.*, GIS vegetation layers, animal species composition and numbers, genetics) should be provided to the Refuge Manager. For long-term monitoring projects, the USFWS may request raw data for management and planning purposes for the refuges.

### **Publications**

Describe the ultimate disposition of study results as publications in scientific journals, presentation at professional symposiums, or final reports.

### **Disposition of Samples**

If the project entails the collection of biotic and/or abiotic (*e.g.*, sediment) samples, then describe their storage. Although the samples may be in the possession of scientists for the purposes of conducting research in accordance with the Special Use Permit, the USFWS retains ownership of all samples collected on refuge lands. If the samples will be used for subsequent research activities that are not described within the original proposal, an addendum to the original proposal must be submitted to the Refuge Manager to obtain a new Special Use Permit before initiation of the follow-up project. After conclusion of the research activities, consult with the Refuge Manager regarding the final disposition of the samples.