

Summary of Washington Maritime National Wildlife Refuge Complex Fire Management Plan

Fire Management Objectives

Fire management goals must be consistent with the general management goals and objectives for each refuge. The overall objective for fire management on the Washington Maritime National Wildlife Refuge Complex, of which the Washington Islands NWRs is a part, is to promote a program that provides for firefighter and public safety, reduces the occurrence of human-caused fires, and ensures appropriate suppression response capability to meet expected wildland fire complexity. We would also use appropriate suppression tactics and strategies that minimize the long-term impacts of suppression actions.

Structures and Facilities

In the Washington Islands NWRs, only Destruction Island contains any structures. The U.S. Coast Guard maintains a lighthouse, a bunkhouse, and a water tower. The National Data Buoy Center owns and maintains a C-MAN Station with a DACT payload. The C-MAN provides information such as wind direction, speed, and gust; atmospheric pressure; pressure tendency; air temperature; and wind chill.

Public Access

We prohibit all general public access to the Washington Islands NWRs. Destruction Island is open only to the U.S. Coast Guard for maintenance of their facilities. We request a 200-yard buffer around all refuge lands and a 2000-foot elevation buffer for overflights.

Historic Role of Fire

Pre-settlement Fires

Wildland fire probably did not have an ecologically significant role on any of the Washington Maritime Complex Refuges. It is unlikely that lightning-caused fires were common on any of the smaller islands due to their small size, relative lack of burnable fuels, and generally wet conditions throughout much of the year. If fires did occur, they probably burned with low intensity and were restricted to individual islands.

Prescribed Fire History

No prescribed fires have occurred on any of the refuges. At this time, we are not planning a prescribed fire program at any of the refuges.

Historical Weather Analysis

The Washington Islands NWRs fall under the West Olympic-Coastal climate region with annual precipitation ranging from 70 to 100 inches over the coastal plains, to 150 inches along the windward slopes of the mountains, and 184 inches in the rainforest area. Lightning is not a common occurrence, and public use is restricted. Therefore, fire danger is typically low. The general fire season recognized by the Washington Department of Natural Resources Olympic Region runs from June to September. Depending on the specific weather of any particular year the seasons may be shorter or longer and, therefore, may start earlier or last longer.

Fire Prevention

We may conduct an active fire prevention program, as needed, in conjunction with other agencies to protect human life and property, and prevent damage to natural and cultural resources or physical facilities. During periods of extreme or prolonged fire danger, emergency restrictions regarding refuge operations or area closures may become necessary.

Hazard Reduction for Structure Protection

We undertake hazard fuel reduction to prevent wildland fires from spreading onto structures owned by the Service. In the Washington Islands NWRs, the U.S. Coast Guard maintains the grounds and structures (lighthouse, bunkhouse, water tower, and helibase) on Destruction Island.

Pre-Attack Plan

Upon discovery of a fire, all subsequent actions will be based on the following:

- The Incident Commander (IC) will locate, size-up, and coordinate suppression actions. The IC will complete the pre-attack planning checklist.
- Provide for public safety.
- Considering the current and predicted fire conditions, the Incident Commander will assess the need for additional suppression resources and estimate the final size of the fire. The potential for spread outside of the refuge should be predicted, as well as the total suppression force required to initiate effective containment action at the beginning of each burning period.
- The Incident Commander will assess the need for law enforcement personnel for traffic control, investigations, evacuations, etc., and make the request to the Fire Management Officer (FMO).
- Document decisions and complete the fire report (DI-1202).
- Should a wildland fire move into an extended attack a Delegation of Authority will be invoked. Once a Delegation of Authority has been authorized, the Incident Commander will make the final decisions pertaining to the fire.

Fire Effects

Of primary interest to us are the effects of fire on threatened and endangered species occurring on or near our Refuge lands. Those that might be affected include the brown pelican, marbled murrelet, bald eagle, western snowy plover, and Steller (Northern) sea lion. Adult birds would probably abandon roosts and nests, therefore being unaffected by a fire. Smoke and fire may result in chick mortality. Adult marine mammals would abandon their haul-outs; their young could be affected by smoke inhalation and fire if they are unable to follow their parents.

Although the impact of fire on adult birds and marine mammals would be negligible, fire also affects their habitat. Habitat destruction depends on the severity of the fire. A low severity may have little impact, as nesting birds might be able to reuse their previous nesting sites or move to other appropriate sites nearby. With a severe fire, nesting sites and appropriate alternatives may be destroyed, impacting future productivity.

The other threatened and endangered species that occur near our Refuge lands, such as the whales and Lake Ozette sockeye would likely not be directly impacted by fire. After a fire, sediment run-off could be an issue for the sockeye. If retardant is used to suppress the fire, it may leach into the water and affect the sockeye, even though the use of fire retardant is restricted within 300 feet of any water bodies.

Fire Management Strategies

There are three general primary suppression strategies that may be used to aggressively attack wildland fires – confine, contain, and control. Confine means to restrict a fire within predetermined boundaries, contain means to surround the fire with a fireline to limit its spread, and control means to put out the fire.

The wilderness island setting of the Washington Islands NWRs presents a unique challenge to wildland fire suppression. The islands are scattered, surf action makes boat docking difficult, and access to the general public is restricted. The size of each island is relatively small, and the spread of fire would probably be rapid. The possibility of damage to natural wildlife habitat occurring during suppression action may exceed the damage caused by, or offset the positive effects of, a naturally occurring fire.

Therefore, a confinement strategy would likely be most appropriate for the Washington Islands NWRs. Monitoring the fire from the mainland and/or an aerial platform to make sure it does not spread to another island would accomplish this strategy. If natural or cultural resources are threatened by a fire, a containment or control strategy may be implemented if the Incident Commander decides that containing or controlling the fire is necessary, and that doing so would not endanger the safety of firefighters. Minimum impact suppression tactics (MIST) will be employed to protect all resources.

Wildland Fire Situation Analysis

For fires that cannot be contained in one burning period, a Wildland Fire Situation Analysis (WFSA) must be prepared. In the case of a wildland fire, the Refuge Manager, in conjunction with the Zone FMO, will prepare the WFSA. Approval of the WFSA resides with the Refuge Manager. The purpose of the WFSA is to allow for a consideration of alternatives by which a fire may be controlled. Damages from the fire, suppression costs, safety, and the probable character of suppression actions are all important considerations.

Aircraft Operations

Aircraft may be used in all phases of fire management operations. All aircraft must be Office of Aircraft Services (OAS) or Forest Service approved. An OAS Aviation Policy Department Manual will be provided by OAS.

Rehabilitation and Restoration

There are three types of fire rehabilitation – suppression, burned area, and emergency stabilization. Suppression rehabilitation restores and repairs property and resources damaged from direct suppression activity, i.e. cut fences, dozer lines, and campsites. Burned area rehabilitation and stabilization restores resources and property damaged or otherwise affected from the fire, i.e. burned waterlines, denuded hillsides, etc

Fire Investigation

Fire management personnel will attempt to locate and protect the probable point of origin and record pertinent information required to determine fire cause. They will be alert for possible evidence, protect the scene and report findings to the fireline supervisor.

Public Information and Education

Educating the public on the value of fire as a natural process, or the consequences of fire in areas that are not normally subjected to natural fires, is important to increasing public understanding and support for any fire management program. We will use the most appropriate and effective means to explain the overall fire and smoke management program as needed. This may include supplemental handouts, signing, personal contacts, or media releases. When deemed necessary, interpretive presentations will address the fire management program and explain the role of fire in the environment. A program of internal and external education regarding potential fire danger may be implemented. Visitor contacts, bulletin board materials, handouts and interpretive programs can be utilized to increase visitor and neighbor awareness of fire hazards.