

NW

Conservation

Wild Steelhead Coalition Unveils Plan for Washington's Wild Steelhead

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Wild steelhead are in crisis throughout Washington. Except for a handful of stocks on the Olympic Peninsula and in southwest Washington, wild steelhead in the state have been in a prolonged period of serious decline, and most of Washington's wild steelhead stocks are either already listed on the federal Endangered Species Act, chronically failing to meet habitat-related escapement goals, or are in a period of declining abundance. Wild steelhead declines in Washington are just one part of a much broader pattern of decline.

In the past century, the entire Pacific Northwest has witnessed catastrophic declines in wild salmonid populations and run productivity due to a combination of degraded freshwater and estuarine habitat, poor hatchery practices, hydropower dams, natural cycles in river- and ocean-carrying capacities, and management and harvest policies.

In the mid-1950s, more than 125 Washington rivers produced wild steelhead harvests, and 120,000 to 160,000 steelhead were annually harvested by Washington anglers. Recently, only 11 rivers have remained open to harvest, and by the 2002–03 season, the harvest was just 3,554 fish, most of them from a few rivers on the Olympic Peninsula.

History shows that Maximum Sustained Harvest (MSH) concepts, the ruling management philosophy for Washington's wild steelhead, are a prescription for periodic and long-term escapement failures and fishery closures. The high harvest rates promoted by MSH management aim to keep spawner numbers low. MSH harvest rates are based on an attempt to maximize annual harvests, not on protecting the long-term resilience of the target fish populations. For Washington's steelhead, the combination of harvest-driven low escapements and unrecognized and/or unpredictable natural changes in river and ocean productivity results in run sizes that often fail to meet escapement goals. As a consequence of chronically depleted runs, the health and resilience of the steelhead populations are jeopardized.

Only during periods of high run productivity do MSH policies meet the management objectives of providing substantial harvest opportunities without compromising stock productivity. It is clear that productivity varies in space and time due to both human- and climate-related changes in river, estuary, and ocean conditions. It is also apparent that healthy steelhead populations exhibit a great deal of diversity in life histories and that this diversity is critical for maintaining population resilience in a variable environment. The MSH concept is not focused on diversity and fails to account for time-space changes in productivity. The flaws in the MSH concept are unfortunately demonstrated in streams such as those on Hood Canal and south Puget Sound, where steelhead populations plummeted one to two decades ago and still remain at low levels in spite of prolonged harvest closures.

An additional serious problem with MSH concepts regarding Washington's steelhead is that the data used to develop escapement goals are based on run sizes and productivity starting in 1976. By then—significantly—many stocks were already in severe decline. For example, the annual harvest on the Skagit River in the 1950s (when spawner escapement was not counted as part of the run) was often higher than the total runs (harvest plus wild escapement) in the years after 1976. Contrary to MSH's scientific underpinnings, many of Washington's rivers with very low wild steelhead spawner populations have failed to rebound.

The Wild Steelhead Coalition (WSC) believes that the present MSH policies place the remaining few healthy stocks at an unnecessary and unacceptable risk of overfishing and fishing closures. MSH policies put the steelhead populations of the Olympic Peninsula rivers at risk of collapse and place Peninsula steelhead fisheries at risk of closure if (and likely when) productivity declines from the high levels experienced in the recent past. With this probable occurrence, all wild-stock fisheries in Washington may be closed to fishing.

The four pillars supporting the health of wild anadromous fish populations are abundance, life history and genetic diversity, spatial distribution, and productivity. Each of these pillars supports the inherent resilience of a steelhead population, its capacity to bounce back from short periods of low abundance. The MSH concept runs counter to the first three pillars and by doing so, also undermines the fourth.

Washington's existing habitat-related stress on salmonid populations is periodically amplified by natural downturns in productivity related to changes in ocean conditions, regional drought, extreme flooding, and landslide episodes. Layering MSH harvest policies upon these largely unpredictable changes and the highly degraded habitat amounts to a management philosophy that errs strongly on the side of providing maximum numbers of wild steelhead for harvest at the risk of seriously depleting spawner abundances and diversity. The high harvest rates that come with MSH fisheries remove the least productive and most heavily fished components of the stock as a whole, thereby reducing the abundance and life history diversity of the stock complex, which ultimately leads to a reduced spatial distribution of spawners. This combination results in a quadruple threat to the long-term health of wild steelhead stocks.

The WSC believes that co-managers must adopt approaches that foster wild steelhead resilience. To that end, the WSC contends that optimizing the balance between providing quality steelhead-fishing opportunities and protecting steelhead ecosystems demands a shift away from past MSH policies toward a greater use of Wild Fish Release (WFR) and selective gear regulations. Increasing the use of WFR while reducing harvest would offer immediate economic benefits in the form of maximizing recreational seasons and quality fishing. At the same time, WFR policies would yield immediate ecological benefits by vastly reducing fishing impacts on the four pillars that affect adult spawner populations. A greater use of selective gear regulations would increase the protection for resident rainbow trout, parr, smolts, and fish of other species that are integral parts of steelhead ecosystems.

The WSC has developed a management plan for wild steelhead based on the best science, ecological principles, and angler support. This plan provides for improved conservation of healthy stocks and recovery of those that are now depleted, with goals to rebuild all stocks. It also allows for high stock productivity periods to help maintain viable populations and quality fisheries through the low productive periods. The WSC also suggests limited harvest fisheries on wild fish when their abundance is 50 percent above the minimal escapements prescribed by MSH models. Reformed hatchery production should continue to provide the lion's share of the steelhead harvest so that wild fish runs can remain healthy and provide for quality WFR full-season fisheries.

A shift away from a focus on maximizing the harvest to a focus on protecting and restoring the wealth the fish bring to our watersheds is a long-term philosophy that promises to benefit the overall health of Washington's wild steelhead. For a copy of the entire plan, visit www.wildsteelheadcoalition.com.