

FISH MANAGEMENT PLANS
THE PILLAR-WIDGEON AND HAMPTON LAKE CHAINS

Updated July 15th, 2013 by Chad Jackson, District 5 Fish Biologist

Water(s): Pillar-Widgeon Lake Chain: (Pillar, Snipe, Cattail, Gadwall, Poacher, Lemna, Shoveler, Sago, Hourglass, and Widgeon Lakes) and Hampton Lake Chain: (Upper Hampton, Lower Hampton, Hampton Slough Complex [Hampton Slough, Hen, Dabbler, and three unnamed ponds], and Marie Lakes)

Location: Waters within the Pillar-Widgeon and Hampton Lake Chains are located within the Columbia National Wildlife Refuge in Grant County at T17N-R29E-S19, 30, & 31.

Physical Description of Water(s): Upstream → Downstream

- a. **Water Name:** Pillar Lake
 - b. **Location:** T17N-R29E-S19
 - c. **Size:** 9.8 Surface Acres (SA)
 - d. **Average Depth:** 12.0 feet
 - e. **Maximum Depth:** 37.0 feet
 - f. **Water Volume:** 117.6 Acre Feet (AF)
 - g. **Inlet Description:** Subterranean flow influenced by groundwater/water table. Unknown and seasonally influenced quantity of water into Pillar Lake.
 - h. **Outlet Description:** Intermittent flow into Snipe Lake. Outlet approximately 30 yards in length and ≤ 1 cfs of flow.
 - i. **Public Access:** Walk-in only. Access managed by CNWR staff.
 - j. **Land Ownership:** 100% federal government ownership (United States Fish and Wildlife Service-USFWS).
 - k. **Established Resorts:** None
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- a. **Water Name:** Snipe Lake
 - b. **Location:** T17N-R29E-S19
 - c. **Size:** 4.0 SA
 - d. **Average Depth:** No Data
 - e. **Maximum Depth:** 15.0 feet
 - f. **Water Volume:** 60.0 AF
 - g. **Inlet Description:** Intermittent flow from Pillar Lake. Inlet approximately 30 yards in length and ≤ 1 cfs of flow.
 - h. **Outlet Description:** Perennial flow into Cattail Lake. Outlet approximately 10 yards in length and ≤ 1 cfs of flow.
 - i. **Public Access:** Walk-in only. Access managed by CNWR staff.
 - j. **Land Ownership:** 100% federal government ownership (USFWS).
 - k. **Established Resorts:** None
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- a. **Water Name:** Cattail Lake
 - b. **Location:** T17N-R29E-S19

- c. **Size:** 18.0 SA
- d. **Average Depth:** No Data
- e. **Maximum Depth:** 15.0 feet
- f. **Water Volume:** 270.0 AF
- g. **Inlet Description:** Perennial flow from Snipe Lake. Inlet approximately 10 yards in length and ≤ 1 cfs of flow.
- h. **Outlet Description:** Seepage into Poacher Lake through exiting dike. A culvert used to deliver surface flow into Poacher Lakes is now completely plugged and covered with sediment. As near as I can tell Pillar, Snipe, and Cattail Lakes are completely isolated from the rest of the Pillar-Widgeon Lake Chain.
- i. **Public Access:** Walk-in only. Access managed by CNWR staff.
- j. **Land Ownership:** 100% federal government ownership (USFWS).
- k. **Established Resorts:** None

- a. **Water Name:** Gadwall Lake
- b. **Location:** T17N-R29E-S19
- c. **Size:** 5.0 SA
- d. **Average Depth:** 13.7 feet
- e. **Maximum Depth:** 59.0 feet
- f. **Water Volume:** 68.5 AF
- g. **Inlet Description:** Subterranean flow influenced by groundwater/water table. Unknown and seasonally influenced quantity of water into Gadwall Lake.
- h. **Outlet Description:** Perennial flow into Poacher Lake. Outlet approximately 10 yards in length and ≤ 2 cfs of flow.
- i. **Public Access:** Walk-in only. Access managed by CNWR staff.
- j. **Land Ownership:** 100% federal government ownership (USFWS).
- k. **Established Resorts:** None

- a. **Water Name:** Poacher Lake
- b. **Location:** T17N-R29E-S19
- c. **Size:** 1.0 SA
- d. **Average Depth:** No Data
- e. **Maximum Depth:** 10.0 feet
- f. **Water Volume:** 10.0 AF
- g. **Inlet Description:** Perennial flow from Cattail and Gadwall Lakes. Inlets approximately 10 yards each and ≤ 2 cfs of flow each.
- h. **Outlet Description:** Perennial flow into Shoveler Lake. Outlet approximately 10 yards in length and between ≤ 4 cfs of flow.
- i. **Public Access:** Walk-in only. Access managed by CNWR staff.
- j. **Land Ownership:** 100% federal government ownership (USFWS).
- k. **Established Resorts:** None

- a. **Water Name:** Lemna Lake
- b. **Location:** T17N-R29E-S19
- c. **Size:** 3.0 SA

- d. Average Depth:** No Data
- e. Maximum Depth:** 10.0 feet
- f. Water Volume:** 30.0 AF
- g. Inlet Description:** Subterranean flow influenced by groundwater/water table. Unknown and seasonally influenced quantity of water into Lemna Lake.
- h. Outlet Description:** Intermittent flow into Shoveler Lake. Outlet approximately five yards in length and ≤ 1 cfs of flow.
- i. Public Access:** Walk-in only. Access managed by CNWR staff.
- j. Land Ownership:** 100% federal government ownership (USFWS).
- k. Established Resorts:** None

- a. Water Name:** Shoveler Lake
- b. Location:** T17N-R29E-S19
- c. Size:** 6.0 SA
- d. Average Depth:** 10.5 feet
- e. Maximum Depth:** 63.0 feet
- f. Water Volume:** 88.0 AF
- g. Inlet Description:** Intermittent flow from Lemna Lake. Inlet approximately five yards in length and ≤ 1 cfs of flow.
- h. Outlet Description:** Mostly subterranean during the year, but some seasonal surface flow into Widgeon Lake. Outlet approximately five yards in length and ≤ 1 cfs of flow.
- i. Public Access:** Walk-in only. Access managed by CNWR staff.
- j. Land Ownership:** 100% federal government ownership (USFWS).
- k. Established Resorts:** None

- a. Water Name:** Sago Lake
- b. Location:** T17N-R29E-S19&30
- c. Size:** 1.5 SA
- d. Average Depth:** 14.3 feet
- e. Maximum Depth:** 35.0 feet
- f. Water Volume:** 21.5 AF
- g. Inlet Description:** Subterranean flow influenced by groundwater/water table. Unknown and seasonally influenced quantity into Sago Lake.
- h. Outlet Description:** Perennial flow into Hourglass Lake. Outlet approximately 20 yards in length and ≤ 2 cfs of flow.
- i. Public Access:** Walk-in only. Access managed by CNWR staff.
- j. Land Ownership:** 100% federal government ownership (USFWS).
- k. Established Resorts:** None

- a. Water Name:** Hourglass Lake
- b. Location:** T17N-R29E-S30
- c. Size:** 2.0 SA
- d. Average Depth:** 11.3 feet
- e. Maximum Depth:** 38.0 feet
- f. Water Volume:** 22.6 AF

- g. Inlet Description:** Perennial flow from Sago Lake. Inlet approximately 20 yards in length and ≤ 2 cfs of flow.
- h. Outlet Description:** Perennial flow into Widgeon Lake. Outlet approximately 20 yards in length and ≤ 2 cfs of flow.
- i. Public Access:** Walk-in only. Access managed by CNWR staff.
- j. Land Ownership:** 100% federal government ownership (USFWS).
- k. Established Resorts:** None

- a. Water Name:** Widgeon Lake
- b. Location:** T17N-R29E-S30
- c. Size:** 10.8 SA
- d. Average Depth:** 14.2 feet
- e. Maximum Depth:** 38 feet
- f. Water Volume:** 153.4 AF
- g. Inlet Description:** Perennial flow from Hourglass Lake and intermittent flow from Shoveler Lake. Perennial inlet approximately 20 yards in length and ≤ 2 cfs of flow. Intermittent inlet approximately five yards in length and ≤ 1 cfs of flow.
- h. Outlet Description:** Perennial flow into Upper Hampton Lake. Outlet is approximately $\frac{1}{4}$ mile in length and ≤ 3 cfs of flow.
- i. Public Access:** Walk-in access only. Access managed by CNWR staff.
- j. Land Ownership:** 100% federal government ownership (USFWS).
- k. Established Resorts:** None

- a. Water Name:** Upper Hampton Lake
- b. Location:** T17N-R29E-S30
- c. Size:** 68.0 SA
- d. Average Depth:** 12.3 feet
- e. Maximum Depth:** 61.0 feet
- f. Water Volume:** 839.0 AF
- g. Inlet Description:** Perennial flow from Widgeon Lake and subterranean flow from Potholes Canal. Perennial inlet approximately $\frac{1}{4}$ mile in length and ≤ 3 cfs
- h. Outlet Description:** Perennial flow into Hen Lake and intermittent flow into Lower Hampton Lake. Perennial outlet approximately 200 yards in length and ≤ 5 cfs of flow. Intermittent outlet approximately 10 yards in length and ≤ 1 cfs of flow.
- i. Public Access:** Walk-in only. Access managed by CNWR staff.
- j. Land Ownership:** 100% federal government ownership (USFWS).
- k. Established Resorts:** None

- a. Water Name:** Lower Hampton Lake
- b. Location:** T17N-R29E-S30
- c. Surface Acres:** 20.0 SA
- d. Average Depth:** 23.6 feet
- e. Maximum Depth:** 46.0 feet

- f. **Water Volume:** 472.0 AF
 - g. **Inlet Description:** Intermittent flow from Upper Hampton Lake. Intermittent outlet approximately 10 yards in length and ≤ 1 cfs of flow.
 - h. **Outlet Description:** Perennial flow into Hen Lake and seepage into the Hampton Slough Complex. The outlet from Lower Hampton Lake into Hen Lake cascades for approximate 10 yards at a “steep” gradient with ≤ 3 cfs of flow. This outlet is a potential upstream fish passage barrier. A culvert use to deliver surface flow between Lower Hampton Lake and the Hampton Slough Complex. However, this culvert is completely blocked and covered with sediment with the only water exchange between the two being seepage through the dike. As such, fish can no longer migrate from the Hampton Slough Complex into Lower Hampton Lake.
 - i. **Public Access:** Vehicle access at south end of lake. Access managed by CNWR staff.
 - j. **Land Ownership:** 100% federal government ownership (USFWS).
 - k. **Established Resorts:** None
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- a. **Water Name:** Hampton Slough Complex (Hampton Slough, Hen Lake, Dabbler Lake, approximately three small unnamed ponds, and interconnected inlets/outlets)
 - b. **Location:** T17N-R29E-S31
 - c. **Surface Acres:** Approximately 15.0 SA
 - d. **Average Depth:** Variable
 - e. **Maximum Depth:** Variable
 - f. **Water Volume:** Approximately 100.0 AF
 - g. **Inlet Description:** Two inlets into the Hampton Slough Complex from Lower Hampton Lake. The first inlet is seepage through the dike between Lower Hampton Lake and Hampton Slough. A culvert use to deliver surface flow between Lower Hampton Lake and the Hampton Slough. This culvert is completely blocked and covered with sediment. As such, fish can no longer migrate from the Hampton Slough into Lower Hampton Lake. The second inlet is flow from Lower Hampton Lake into Hen Lake.
 - h. **Outlet Description:** Two outlets with perennial flow (2-8 cfs) from the Hampton Slough Complex. The first inlet is flow (~2 cfs) from Hampton Slough and through two small (<1.0 SA) unnamed ponds into Marie Lake. The second inlet is flow (~8 cfs) from Hen Lake through a drop culver structure into a small unnamed pond, Dabbler Lake, and then Marie Lake.
 - i. **Public Access:** Walk-in only. Access managed by CNWR staff.
 - j. **Land Ownership:** 100% federal government ownership (USFWS).
 - k. **Established Resorts:** None
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- a. **Water Name:** Marie Lake
 - b. **Location:** T17N-R29E-S31
 - c. **Surface Acres (Estimated after ~6.0 feet lake drawdown):** 3.0 SA
 - d. **Average Depth:** No Data
 - e. **Maximum Depth:** 8.0 feet

- f. Water Volume:** 24.0 AF
- g. Inlet Description:** Two inlets with perennial flow (2-8 cfs) from the Hampton Slough Complex (see above).
- h. Outlet Description:** Normally, perennial flow (~11 cfs) into Para-Juvenile Lakes, however, with lake drawdown there would be none until detoxification and refill.
- i. Public Access:** Walk-in only. Access managed by CNWR staff.
- j. Land Ownership:** 100% federal government ownership (USFWS).
- k. Established Resorts:** None

Historical Fish Management:

Waters within the Pillar-Widgeon and Hampton Lake Chains have been managed as trout fisheries by WDFW since the 1950s. Trout fisheries were maintained through annual plants of fingerling rainbow trout (2-3 inches) during the spring and/or fall from local hatcheries. Fingerling rainbow trout utilize a particular lake's productivity to grow to catchable size (11-13 inches) by the following spring. Yearling rainbow trout would then comprise the majority of an angler's catch on opening day and throughout the season.

Rainbow trout fisheries fish the best when maintained as monocultures free from competing, predatory, or nuisance fish species such as common carp, sunfish, bass, and/or bullheads. In order to maintain trout monocultures, fishery managers must periodically treat lakes (called lake rehabilitations) with the aquatic pesticide rotenone to eradicate competing, predatory, and/or nuisance fish species. Waters within the Pillar-Widgeon and Hampton Lake Chains have been rehabilitated 2-4 times in the past. The last time these two lake chains were rehabilitated was back in 2004. Lake rehabilitations typically last 7-10 years before another treatment is necessary.

Fishing seasons and harvest regulations have varied in these two lake chains since the 1950s. During the early and middle 1950s, most of the waters were open year-round to fishing with liberal daily bag limits of trout (e.g., 7.5 pounds + 1 trout, provided total catch is ≤ 15 fish). Later, several lakes changed from year-round to a variety of seasonal regulations (e.g., spring through summer, spring through fall, winter seasons, split seasons, etc.). These changes likely occurred because several waters during this time period received legal names and therefore could be easily listed in the annual fishing regulations pamphlet. Harvest regulations remained liberal until 1983 when they were changed to a five fish daily bag limit. This harvest regulation remains the same today.

Current Fish Management:

Waters within the Pillar-Widgeon and Hampton Lake Chains are still managed as trout fisheries. Hatchery plants of rainbow trout fingerlings maintain these fisheries. The only change is that some of these waters are no longer stocked because over the years they have become too shallow and warm to sustain trout. Lakes no longer stocked with rainbow trout include Dabbler, Hen, Marie, and Hampton Slough. The remaining lakes stocked with trout are open seasonally from April 1st through September 30th. The Hampton Lakes are the most popular waters and receive the highest angler effort annually.

Proposed Fish Management:

Following the rehabilitations, waters within the Pillar-Widgeon Lake Chain and Upper/Lower Hampton Lake will be restocked with rainbow trout fingerlings during the spring and/or fall. Proposed stocking rates for all waters will range between 200-300 fingerlings per surface acre. Since fingerlings require one year to grow to catchable size (11-13”), there will be no 2014 fishing season. Due to federal refuge policy, hatchery catchable rainbow trout cannot be stocked into any of these lakes in 2014. Recreational fishing will resume April 1st, 2015. The angling public will be notified through signage at the access sites, the media, and other publications.