

# METHOW WILDLIFE AREA 2017 MANAGEMENT PLAN UPDATE

Washington Department of Fish and Wildlife

# Land Management Summary

This is an update to the 2006 Methow Wildlife Area Management Plan. This plan provides management direction for the 34,000-acre wildlife area in Okanogan County. The plan identifies needs and guides activities on the wildlife area based on the Washington Department of Fish and Wildlife's (WDFW) Mission: "Preserve, protect and perpetuate fish, wildlife and ecosystems while providing sustainable fish and wildlife, recreational and commercial opportunities" and its underlying statewide goals and objectives as they apply to local conditions.



Photo Credit: Justin Haug

Plans are typically updated every 2-3 years as habitat and species conditions change, as new regulations and scientific knowledge develop, as public issues and concerns evolve, and as administration of wildlife areas change. This management plan update includes 2014 - 2016 accomplishments, new issues, new land management strategies, and performance measures for 2018-2019.

#### **Updates/Changes**

#### **Fires**

In 2014, the Methow Wildlife Area (MWLA) found itself in the path of the largest wildfire in Washington state history, the Carlton Complex Fire. The fire burned over 256,000 acres of private, state, and federal lands. Of the total acres burned, nearly 16,000 were on the Methow Wildlife Area, predominantly in the Texas Creek and Methow units. The fire raced through large tracts of the wildlife area's shrub-steppe habitat and burned with mixed severity in forested land.

In 2015, the Okanogan Complex Fire burned through the Big Buck Unit of the Methow Wildlife Area with mixed severity ranging from moderate to high. By the time it was all said and done, the Okanogan Complex had surpassed the Carlton Complex as the largest fire in Washington State history. The Okanogan Complex burned over 304,000 acres, and 3,000 of those acres were at the Big Buck Unit.

### Inside

Land Management Summary	1
Updates/Changes	1
New Issues	5
Major Stewardship Accomplishments	6
Status Report on 2014-16 Performance	
Measures	8
2018-19 Performance Measures	10
Wildlife Area Advisory Committee Input	11
Contact Information	11



Photo Credit: Brandon Troyer

Wildfire plays a crucial and necessary ecological role in our fire dependent ecosystems within the Methow Valley. Due to approximately 120 years of fire suppression in the west, our forests have grown unnaturally dense coupled with an abundance of small diameter trees, dense shrub layers, and dead wood littering the forest floor. The historic densities of ponderosa pine dominant forests on the wildlife area averaged approximately 30-50 trees per acre with an open, park like understory. Currently, many of our forests vary in overstocked densities of 400-1,500 trees per acre. These overstocked forests have also shifted in species composition as well. The fire resilient ponderosa pines have been encroached upon by shade tolerant, less fire resistant Douglas firs which commonly act as a fuel ladder. The smaller Douglas firs often carry fire from the forest floor into the unnaturally dense canopies, which can result in high severity, stand replacing wildfire. To combat these forest health concerns, the Methow Wildlife Area is placing a strong emphasis on forest restoration projects that are designed to reduce overstocked forests to historic densities and composition while mimicking low to moderate intensity historic fire regimes via prescribed burning.

#### **Integrated Pest Management**

The Methow Wildlife Area continues to implement its Integrated Pest Management (IPM) program, especially after the wildfires of 2014 and 2015. The wildlife area has employed a variety of weed control tactics in accordance with accepted IPM standards such as sustainable farming, herbicide applications, releasing of biological control agents, and mechanical controls such as mowing and handpulling of weeds. Herbicide treatments alone have accounted for nearly 1,300 acres of weed treatments with a large emphasis placed on a wide variety of noxious weeds such as diffuse and Russian knapweeds, hoary cress, houndstongue, Kochia, Canada and Scotch thistle, Russian thistle, Oxeye daisy, and Dalmatian toadflax. Nearly 600 acres of historic farmlands have been leased for agricultural production to combat noxious weeds and to provide cover and forage for wildlife as well as to support the local economy and community character of the agriculturally-rich Methow Valley. With the support and assistance of Washington State University, over 12,000 biological control agents have been released and monitored throughout the wildlife area in the past 5 years. One of the most successful uses of a biological control agent on the wildlife area is that of Mecinus janthinus. This particular biological agent is a shiny black weevil that feeds upon the foliage of Dalmatian and yellow



. Photo Credit: Brandon Trover

toadflax. During the larval stage, this bio-control forages within the stem of the plant which hinders flowering and seed production. Mecinus janthinus has self-propagated throughout the Methow Valley and can be commonly found within invasive toadflax infestations. Mecinus janthinus has been thoroughly researched and is no threat to endemic plants as it solely feeds upon invasive toadflax.

## **Cultural Resources**

#### Historic Buildings and Structures Inventory

An intensive level inventory and National Register of Historic Places evaluation was performed on all known historical buildings and structures on the Methow Wildlife Area in 2016. The assessment was performed by Architectural History & Archaeology, LLC. This cultural significance assessment successfully (1) created an accurate baseline inventory of historical buildings and structures within the MWLA, (2) determined which historical buildings and structures within the MWLA have been adequately recorded and evaluated for



Photo Credit: Brandon Troyer

significance, and completed inventory forms with historical significance recommendations for the remainder, and (3) created a decision matrix for prioritizing built environment conservation efforts. Ten of the 14 intensively surveyed, widely-dispersed properties were determined to be of 'historical significance'. These properties were dated from the early to mid-twentieth century and were comprised of agricultural, residential, or administrative sites. Five of the 'historically significant' properties were recommended to be eligible for the National Register of Historic Places and would therefore qualify for listing on the Washington Heritage Register.

#### Forested Cultural Resource Surveys

A critical component of the Methow Forest Restoration Phase I project was to perform in-depth cultural resource surveys within the 'Areas of Potential Effect'. In doing so, nearly 900 acres of mostly timbered land on the Methow Wildlife Area were surveyed by WDFW and other Washington state archaeologists. Approximately 450 + acres were surveyed in the Bear Creek and Cougar Creek drainages while Ramsey Creek had roughly 400+ acres surveyed. Additionally, 50 acres of cultural resource surveys were performed near Buck Lake.

## **Infrastructure**

#### Fences

The Carlton and Okanogan Complex fires created a largescale loss of infrastructure on the MWLA, particularly fences and gates. From a land management perspective, it is extremely important to have intact fencing, especially on wildlife area boundaries. Not only do these fences delineate property boundaries but they also aid in retaining permitted livestock grazing while correspondingly deterring unauthorized livestock from entering department lands. With post-wildfire funding assistance from the Federal Emergency Management Agency (FEMA), the Methow Wildlife Area has been



Photo Credit: Brandon Troyer

able to replace nearly 100 miles of fence as well as upwards of 50 gates.

The newly constructed fence design implemented by the MWLA was thoroughly researched and addresses both wildlife and livestock priorities. For example, the 4-strand fence design consists of a smooth bottom wire that is properly spaced from the ground to allow wildlife such fawns and other smaller animals to slip under without damage to themselves. The top wire is slightly lower than standard livestock fence to make it easier for deer to jump, particularly where terrain steepens. There is also a noticeable gap between the top wire and the next wire below since this allows animals a third alternative for passing through the fence from either below, above, or inbetween wires. The reason for the majority of wires being barbed is simply to deter livestock from pushing through or leaning on the fence. The aforementioned livestock forces exerted on non-barbed fences results in loosened wires, which proves far more detrimental to wildlife as compared to a tightly strung barbed fence. Loose wires, especially on the upper portions of a fence increase the probability of a deer becoming twisted and trapped by the fence, which is exactly what we are trying to avoid with the newly improved fence design.

#### **Irrigation**

In the last several years, the Methow Wildlife Area has experienced marked improvements to irrigation systems on our leased agricultural lands in the form of 12 new center pivot/ overhead type sprinkler irrigation systems. The Big Valley Unit now has four new overhead irrigation systems, three new systems were installed near Beaver Creek, and an additional five overhead systems were installed near Texas Creek. These improved irrigation systems prove to be much more efficient as they allow the operator to irrigate in a calibrated, prescriptive, less consumptive manner while increasing overall crop yields and utilizing water resources more sustainably.

## **Recreation**

Countless recreational opportunities abound on the Methow Wildlife Area throughout all seasons. One of the renowned recreational hotspots in the Methow Valley are the winter trails that are annually groomed at the Lloyd Ranch on the Methow Unit. These trails are part of a collaborative winter recreation effort between Pearrygin Lake State Park and the Methow Wildlife Area. The trails are maintained by a dedicated group of local volunteers and cater to a diverse range of recreation enthusiasts including cross-country skiers, fat-tire bikers, and snowshoers. The winter recreation trails at Lloyd Ranch not only provide miles of diverse use but also directs the public away from sensitive wintering mule deer habitats.



Photo Credit: Brandon Troyer

The Methow Wildlife Area also plays host to an array of special-use events. It is not uncommon to encounter archaeologists and anthropologists from renowned museums/institutions that are studying geological formations while at the same time witnessing permitted historic, multi-day horse and wagon trail riding events like the Ride to Rendezvous. Other events might entice endurance enthusiasts in the form of organized hiking, trail and distance running, cross-country skiing and other outdoor training or competition events. The MWLA also hosts a number of educational outreach programs conducted at locations such as the Chewuch River and the Cottonwood Trail.



Photo Credit: Brandon Troyer

# **New Issues**

### **Unauthorized Trails**

Nearly all units of the 34,000-acre Methow Wildlife Area have been negatively impacted by unauthorized, userbuilt trails. For example, the Golden Doe, Rendezvous, and Big Buck units are now stratified with poorly built, overused and unauthorized trails. In many instances, these trails accelerate detrimental impacts upon the surrounding habitat on top of fragmenting the overall ecosystem. These illegal trails pose serious concerns to the landscape as trails begin to erode within a year due to improper planning and construction. Many illegal trails are being constructed in post-fire recovery areas and contribute to the transportation and spread of



Photo Credit: Methow Trails

invasive species while simultaneously jeopardizing native plant revegetation and wildlife habitat. Additionally, unauthorized trails pose serious risks to sensitive habitats and endangered wildlife, various cultural resources, and post-fire shrub-steppe recovery.

To combat the practice of unauthorized trail construction, the Methow Wildlife Area will engage in volunteer projects aimed at the sustainable rehabilitation of existing, acknowledged, and/or historic trails while decommissioning unauthorized trails in tandem. The objective is to deter unauthorized trail use by providing our users with authorized and improved existing trails that are mapped, built to safety/construction standards, and meet a range of recreational user needs. For the Methow Wildlife Area to continue providing sustainable recreational opportunities, unauthorized trail building must come to a halt.

# **Major Stewardship Accomplishments**

#### **Forest Restoration**

In terms of land stewardship, one of the recent flagship accomplishments at the Methow Wildlife Area is that of the implementation and completion of the Recreation Conservation Office (RCO) funded "Methow Forest Restoration Phase I" project. The primary focus of this project was to restore overstocked forests to a healthier, historic, pre-fire suppression state. To accomplish this, the silviculture assessments and prescription were divided into two categories which were the "Post-Fire Forest Management Phase" for areas burned in 2014 as well as the "North Methow Phase" aimed at addressing current and future forest management needs in areas not burned in 2014.

The Post-Fire Forest Management Phase occurred in the Bear Creek and Cougar Flats vicinity and was prescribed under two primary focal points after the Carlton Complex, habitat restoration and hazard tree mitigation. Mechanical thinning operations commenced in January of 2015 operating in a manner conducive to the desired outcome of restoring forests to their historic densities to the maximum degree possible while establishing conditions that promote



Photo Credit: Jamie Bass

natural succession towards the historic range of variability. When prioritizing the project location, an emphasis was placed on public safety. Therefore, most efforts were directed to areas of high public use including the campgrounds at Bear Creek and Cougar Lake. Hazard tree mitigation was also prescribed with strong consideration towards the health and safety of the public, hence the locations of hazard tree removals were primarily around campsites, restrooms, and roads. The local community and tourists alike also aided in the project by cutting and thinning downed woody slash via a written permit issued by WDFW with the intent of reducing fuel loads. This area is in the que for prescribed fire within the next year.



Photo Credit: Jamie Bass

The North Methow Phase focused efforts on the unburned areas f Bear Creek, Buck Lake, and Ramsey Creek. The primary objectives of this phase was to restore forests habitat health and function, reduce the risk of stand replacing wildfires, and increase forest resilience to climate change via a series of commercial and non-commercial stocking and fuel reduction treatments. Both Bear Creek and Buck Lake were commercially logged in the winter of 2016. Ramsey Creek has been cruised and marked for future winter logging while over 200 acres were already thinned in the spring of 2017. The "North Methow Phase" is also slated for prescribed fire in the near future using capital dollars from the State Legislature. The Methow Forest Restoration Phase II grant has recently been allocated funding via RCO and future forest restoration projects will commence in 2018.

### **Fisheries Enhancement/Riparian Restoration**

In the past five years, there have been numerous fisheries and riparian enhancement projects implemented on lands managed by the Methow Wildlife Area. Some of these restorative projects have occurred at sites such as Fender Mill, Chewuch Campground, Geestman, and the Silver Side Channel.

In coordination with WDFW, Yakama Nations Fisheries implemented projects on the Methow River and the Chewuch River at sites known as Fender Mill and the Chewuch Campground. The intent of the Fender Mill project in the Big Valley was to improve salmonid habitat by means of creating and enhancing floodplain connectivity via side channel alcoves that are fed by an engineered groundwater gallery. This design allows for and emulates natural processes and provides valuable salmonid rearing habitat, velocity and temperature refuge, and forage opportunities. The goals put forth by the Chewuch Campground Project also targeted the enhancement of habitats for the benefit of ESA-listed



Photo Credit: Yakama Nation Fisheries

salmon and steelhead. On this particular project the primary goals were to increase large woody debris, increase pool depth, and reconnect and improve off-channel habitat. The woody debris component provides many benefits including cover for fish, sediment retention, and it also aids in the creation of scoured, deep pools which are beneficial to a variety of riverine species. Much like the Fender Mill Project, the Chewuch Campground side-channel alcoves also provide crucial juvenile rearing habitat and refuge.



Photo Credit: Yakama Nation Fisheries

The Geestman Bank Stabilization and Riparian Buffer Project was implemented along the banks of the Methow River off Twisp-Carlton Road. This project was brought forth by the Cascade Columbia Fisheries Enhancement Group (CCFEG) in partnership with Methow Natives and WDFW. The primary objectives of this project were to treat and protect nearly 700 ft of actively eroding or bare streambank. To accomplish this task, the slope of the bank was decreased as needed to prevent further erosion. A fir tree revetment and large woody debris were created and placed for additional bank protection. Disturbed and bare ground along the bank and floodplain were planted with soil/bank stabilizing vegetation such as riparian trees and shrubs as well as blue wild rye.

Another project executed by CCFEG in cooperation with WDFW is that of the Silver Side Channel which is located in a floodplain of the Methow River between Twisp and Carlton. The primary objective of this project was to enhance and increase the amount of juvenile salmonid rearing habitat within the floodplain corridor. To accomplish this, a long, narrow, and sinuous side channel was constructed in a manner beneficial to juvenile salmon and steelhead. There were also several acres of open-water that were converted to wetlands. Finally, steps were taken to restore disturbed construction and staging areas within the surrounding meadows to native shrub-steppe habitat.



Photo Credit: Yakama Nation Fisheries

# **Status Report of 2014-2016 Performance Measures**

Key performance measures are identified to monitor progress and identify any issues that might interfere with planned priority activities. This information will be used to delete, add or alter priority strategies for 2018-2019.

2014 to 2016 Performance Measures	Status of Performance Measures	Progress/Related Activities/Comments
Continue intensive weed treatment and planting native shrub-steppe and riparian habitat in historic agricultural fields and riverfront parcels: IPM, re-vegetation.	Ongoing	Weed control and re-seeding measures are being implemented across the wildlife area. The MWLA is also utilizing biological control measures as part of the Integrated Pest Management program.
Work with the U.S. Forest Service to evaluate and determine if new hunting opportunity can be provided for disabled hunters. Continue providing two areas for disabled hunting opportunities.	Complete	In collaboration with the USFS, Bear Mountain is now designated for disabled hunters during deer season via permit.
Continue to work with agricultural lessees - to develop and implement water efficiencies and habitat restoration goals in each area.	Complete	A total of 7 new pivot irrigations systems have been installed on MWLA lands since 2012. The agricultural leases were updated on

2014 to 2016 Performance	Status of Performance	Progress/Related
Measures	Measures	Activities/Comments
		those lands where new irrigations systems were installed.
Control houndstongue on WDFW land- Riser Lake, Little Cub Creek, Judd Ranch, and Breed properties.	Ongoing	Riser lake, Little Cub, and Judd Ranch are still in need of ongoing treatments.
Continue to promote and prioritize a public map to the Wildlife Program for the Methow Wildlife Area.	Ongoing	The Wildlife Area Manager will begin working with the Okanogan Land Ops. Manager and the Lands Showcase Initiative to develop and distribute maps.
Inventory and monitor grazing permits and work with Coordinated Resource Program to continue improving range management.	Ongoing	Forage utilization and long term trend studies are continually in progress. All active leases were renewed in 2017.
Document and Control Dalmatian toadflax populations on the wildlife area. Use biological controls when available. Destroy all new outbreaks/invaders.	Ongoing	The MWLA is employing an IPM approach to control Dalmatian toad flax by utilizing bio-control measures along with herbicidal treatments. The MWLA area employs an IPM approach on most pest management issues.
Continue rare plant - surveys on the Methow Unit of the MWLA if funds are available.	Ongoing	Rare plant surveys were conducted on current salmon habitat restoration sites. Rare plant surveys will be conducted as project funding permits.
Continue to document treatments, and effects of treatments, on white-top populations, and learn from IPM techniques.	Ongoing	Whitetop continues to be one of the primary species of focus of the MWLA pest management program. Large treatments have been made in the Big Buck and Little Cub Creek areas.
Work with local volunteers and Okanogan County Historical Society to develop management plans to preserve designated historic structures on - the MWLA.	Complete	AHA completed a historic building and structures inventory of the Methow Wildlife Area in 2016.
Continue the long-term monitoring plot installation and vegetation surveys on the MWLA.	Ongoing	This task has been taken over by a statewide range ecologist.
Continue to work with USFS Methow Ranger Station to outline	Ongoing	Coordinated treatment burns are planned for the Buck Lake area.

2014 to 2016 Performance Measures	Status of Performance Measures	Progress/Related Activities/Comments
long-term fire and fuels management partnership on WDFW land adjacent to USFS boundaries. Seek funding to implement Forest Management Plan.		Efforts will continue with proposed Rx burns in the Ramsey Creek drainage.
Assist with Road Management and Abandonment Plans (RMAP). Complete and submit all RMAP Forest Practices Application (FPA) documentation to Department of Natural Resources.	Complete/Ongoing	The RMAP is complete and FPA's are currently in place.
Update the Methow wildlife area's web page about selected land management accomplishments of the wildlife area.	This will be covered in the upcoming management plan	Due to staff turnover and other priority needs, this has not yet been completed.
Continue to work with adjacent landowners and WDFW real estate services to provide access to MWLA parcels.	Ongoing with recent successes	Designated parking area at the Geestman property installed. Access issues at the Burns Garrity property resolved. Balky Hill access issues resolved.
Lobby for additional funding to hire (Bio II) for the MWLA.	Complete	Funding for the position was secured and the position has been filled.
Investigate research opportunities for the wildlife area and pursue grant funding.	Complete/Ongoing	Grad students investigating historic sharp-tailed grouse lekking sites. Methow Forest Restoration Phase II approved.

# **2018-19 Performance Measures**

Performance measures for the Methow Wildlife Area are listed below.

Accomplishments and progress toward desired outcomes will be monitored and evaluated annually.

- 1) Control houndstongue on WDFW land- Riser Lake, Little Cub Creek, Judd Ranch, and Breed properties.
- 2) Continue intensive weed treatment and planting native shrub-steppe and riparian habitat in historic agricultural fields and riverfront parcels: IPM, re-vegetation.
- 3) Continue to promote and prioritize a public map to the Wildlife Program for the Methow Wildlife Area.
- 4) Document and Control Dalmatian toadflax populations on the wildlife area. Use biological controls when available. Destroy all new outbreaks/invaders.
- 5) Inventory and monitor grazing permits and work with Coordinated Resource Program to continue improving range management.
- 6) Continue rare plant surveys on the Methow Unit of the MWLA if funds are available.

- 7) Continue to document treatments, and effects of treatments, on white-top populations, and learn from IPM techniques.
- 8) Work with WDFW's Burn Team to outline long-term fire and fuels management projects. Seek funding to implement Forest Management Plan.
- 9) Investigate research opportunities for the wildlife area and pursue grant funding.
- 10) Utilize prescribed burning as a management tool in the Methow Unit.
- 11) Repair infrastructure at the Big Buck Unit that was damaged by the Okanogan Complex Fire.
- 12) Treat  $\geq$  300 acres of noxious weeds annually via varied IPM tactics.
- 13) Continue commercial and non-commercial forest thinning and prescribed burning projects as funding permits.
- 14) Begin development of a new Methow Wildlife Area Management Plan by the end of 2019.

#### Wildlife Area Advisory Group Input

The Methow Wildlife Area Advisory Committee has been inactive since 2013 due to staff turnover. Reinvigoration of this committee will commence in 2018.

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Want to see the full plan? Go to http://wdfw.wa.gov/lands/wildlife\_ areas/management\_plans/



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