

Wildlife Program

Week of December 16-22, 2013

WILDLIFE DIVERSITY DIVISION

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

Wildlife Management



Pygmy Rabbit Recovery: The rabbits are making themselves at home at the new breeding enclosure site in the Beezley Hills. We have observed modifications of drilled auger holes, excavation of drainage tubing burrows, and even observed one natural burrow system (two entrances last time it was observed) and one natural single burrow entrance at a different location. There was much excavation activity, particularly in the drainage tubes when this last cold snap hit.

Pygmy rabbit using drainage tubing burrow.



Left: Modified auger burrow. Right: Pygmy rabbit at a modified burrow in old den (coyote or badger).

Biologist Wisniewski attended a Safe Harbor Agreement coordination meeting with U.S. Fish and Wildlife Service (USFWS), Natural Resource Conservation Service (NRCS) and Farm Service Agency (FSA). It was a good first start to opening the door for better communication and cooperation. Problems were identified and potential solutions discussed. We will meet again at the end of January to discuss the progress that has been made and which areas still need work. It was good to hear the local FSA/NRCS offices are on board with the pygmy rabbit project (and other endangered species) and want to help find ways to support these projects.

Wisniewski spent the rest of the week continuing to become familiar with the project files, preparing for snow surveys, beginning paperwork for permit renewals, and organizing the office.



Natural burrow openings.

Butterfly Conservation: Fish and Wildlife Biologists Ann Potter, Derek Stinson, Mary Linders and Dave Hays began developing a two-year Action Plan for Taylor’s checkerspot. The Action Plan is a new initiative intended to provide a blueprint for near-term actions and long-term goals for the conservation and recovery of Washington listed species – whether or not a recovery plan currently exists. Taylor’s checkerspot is the pilot species for this initiative. The group reviewed recovery strategy elements, defined actions, and assigned leads to complete the action forms which will briefly describe essential information such as the action, the region or location of the action, funding sources, partnerships and resulting outcomes or products.

Species Prioritization and Species of Greatest Conservation Need (SGCN): Biologists Stinson, Hayes, Hallock and Sato along with Section Manager Thompson met to discuss finalizing a scheme to prioritize species conservation. Stinson circulated a draft prioritization of 1,900 species into 10 categories based on NatureServe ranks. Biologists Stinson and Potter met and worked on evaluating invertebrates for the SGCN list update.

USFWS Recovery Funding – Columbia Plateau Ecoregion Final Report: The USFWS provided 2011 Recovery funds to Washington Department of Fish and Wildlife (WDFW) and Washington Wildlife Habitat Connectivity Working Group partners to support detailed analyses of Columbia Plateau connectivity. Along with in-kind contributions and other grants, this funding was critical for developing Columbia Plateau analyses (http://waconnected.org/cp_addendumanalyses/), climate connectivity analyses

(<http://waconnected.org/climate-gradient-corridors-of-the-columbia-plateau-ecoregion/>), and specialty Sage-Grouse, and Sharp-tailed Grouse products. The latter includes products which build on the Columbia Plateau analyses and model validation for the Sage-Grouse models. These products are: (1) a white paper: "Transmission line scenarios and relative impacts to connectivity and nesting habitat for Greater Sage-Grouse on the YTC" by M. Schroeder, A. Shirk, and L. Robb, and, (2) detailed lek-based connectivity analyses (by M. Schroeder, A. Shirk, and L. Robb). Natural Resource Scientist Schuett-Hames is underway developing the final report for this contract. Please contact her at joanne.schuett-hames@dfw.wa.gov if you are interested in a copy.

Nongame Technical Committee: Natural Resource Scientist Joe Buchanan attended the mid-winter meeting of the Nongame Migratory Birds Technical Committee (NTC). The group discussed implementation of Double-crested Cormorant and American White Pelican monitoring, a federal proposal to modify a corvid depredation order, and Golden Eagle management issues. The NTC provides technical support to the Pacific Flyway Council.

Lands Conservation and Restoration: Section Manager Wilkerson and Division Manager Pierce attended the Steering Committee call of the Great Northern LCC. Wilkerson is the WDFW representative on the Steering Committee and Pierce sits on the Advisory Committee for WDFW. We discussed the funding criteria for the 2014 grant cycle. The criteria will include categories for tribal grants, partner forum sponsored grants and strategic science grants. The exact appropriation is not yet known, but likely to be around \$1 million. The Advisory Committee presented their concept for a business plan that centers around two pilot undertakings: one on aquatic integrity and invasive species and another on landscape-level evaluation of connectivity and land use change.

Section Manager Wilkerson travelled to Ellensburg with Deputy Director Stohr and Lands Division Manager Sprague to a joint agency briefing on the co-management of the newly established Teanaway Community Forest near Cle Elum, WA. Department of Natural Resources (DNR) holds the land in fee title and DFW holds a habitat restoration and working lands easement on the 50,000 acre parcel. An interim management plan is due by the end of December and DNR is sending out the first of a regular newsletter in the next week or so (see website at http://www.dnr.wa.gov/BusinessPermits/Topics/OtherLandTransactions/Pages/amp_teanaway.aspx to sign-up). All decisions on management actions are being done jointly between DNR and DFW. This is a precedential decision-making model and the first Community Forest Trust in the state. An Advisory Committee will be appointed in 2014 and there will be a budget request in the short legislative session to support DNR and DFW staff work.

There is also a new Environmental Planner 4 position associated with this work (<http://agency.governmentjobs.com/dnr/default.cfm?action=viewJob&jobID=776057>) as well as funding to hire a facilitator for the community workshops. Please distribute the job posting to qualified and potentially interested applicants.

GOAL 4: BUILD AN EFFECTIVE AND EFFICIENT ORGANIZATION BY SUPPORTING OUR WORKFORCE, IMPROVING BUSINESS PROCESSES, AND INVESTING IN TECHNOLOGY

Wildlife Management

Pacific Coast Joint Venture (PCJV): Diversity Division Manager Gardner presented a developing Citizen Science initiative, the proposed development of an eBird Portal for the Pacific Northwest, to the PCJV. The presentation was preceded by a related presentation on the Avian Knowledge Network that was provided by the Klamath Bird Observatory. Over the last few months, WDFW has corresponded with the Washington Ornithological Society, Seattle Audubon and the Klamath Bird Observatory regarding the regional portal. WDFW took the opportunity provided by the PCJV meeting to present to a larger audience and for key potential partners to meet during the lunch break. Bill Tweit of the Director's Office also attended the meetings and has been very helpful in pulling key potential partners together.

REGION 1

Wolf Management

District 1

Range Rider Conference Call: Supervisor McCanna, Specialist Shepherd and Wildlife Conflict Section Manager Simek held a conference call to discuss next summer's range rider program. Specialist Shepherd is interested in hiring two additional contract riders who would be available to work several different grazing allotments. Also discussed the possibilities of the most experienced range rider provide training for current and new range riders.

Ione Wolf Interaction: Supervisor McCanna, Specialist Shepherd and Officer Erickson responded to a residence south of Ione where the owners reported two wolves surrounding their dogs in the front yard around 1:00 a.m. Two sets of wolf tracks were observed and Specialist Shepherd found that the Ruby Creek female was on the east side of the Pend Oreille at 4:00 a.m. just one mile south of the residence. Preventative advice was given to the landowner regarding their two dogs and children along with advice on cougar and bear conflicts. The Ruby Creek female was about five miles from the residence and back on the west side of the Pend Oreille River at 4:00 p.m.

Concerned Landowner: Supervisor McCanna, Specialist Shepherd and Officer Erickson were flagged down while traveling to the Ione wolf interaction by a Pend Oreille County landowner whose cattle were riled up. All three responded and found no wolf tracks. The landowner has a cow that died of natural causes he drug to the back of the field and was unable to bury it due to the frozen ground. Specialist Shepherd and Officer Erickson will work with the landowner next week to install fladry around the animal and put up a trail camera.

Dead Horse: Supervisor McCanna, Specialist Shepherd and Officer Erickson responded to a landowner residence in Pend Oreille County who reported one of his horses had died and concerned that wolves were the culprit. The site and horse were investigated by all three and came to the conclusion the horse had died from natural causes. The landowner agreed after

inspection and said he rescues horses and this animal has not been able to put on weight for the last six months. Disposal of the animal was discussed with landowner.

District 3 Wolf Activity: A local hunting guide reported multiple sets of wolf tracks on two separate occasions during the past week. It appears that a group of three to five wolves have been travelling in the Tucannon Watershed during the week. A similar activity occurred last year when the Oregon Wenaha Pack came into Washington for a week or two. The sightings are in the same areas as last year's travels.

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

Wildlife Management

Northeast Moose Project: Region 1 Biologists Base, Ferguson, Prince, and Atamian along with Veterinarian Kristin Mansfield, ungulate specialist Scott McCorquodale, Rachel Cook, Special Species Manager Rich Harris and helicopter pilot Jess Hagerman carried out a moose capture operation this week that used immobilization drug darts fired out of a helicopter. A total of 28 moose were captured and outfitted with Vectronic GPS radio-collars – 13 in District 1 and 15 in District 2. All moose captured were adult or yearling cows. These moose will be monitored to assess movements, home range, habitat use and survival. This capture effort is the first phase of a larger study within Region 1 which is designed to evaluate moose body condition in relation to forage availability, reproduction and predation. A recently appointed project biologist and graduate student will be carrying out most of the field work under the auspices of Rich Harris. Tom Owens, Ferguson and Atamian all flight followed at different times during the process. Ferguson and Atamian began working on generating moose density maps and line transect survey lines for the upcoming moose density surveys in January.



Field Crew working on darted moose.



A cow moose exits the capture site after receiving reversal drug.

REGION 2

None.

REGION 3

None.

REGION 4

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

Wildlife Management

Swan Morbidity and Mortality Project: Technician Sherman Anderson collected 13 swans: 12 from Whatcom County (8 lead, 3 unknown, 1 Powerline) and 1 from Skagit County which died from unknown causes prior to taking leave time. In Anderson's absence, Biologists DeBruyn and Danilson monitored WDFW's swan hotline, coordinated with "swan team" partners, responded to calls and recovered an additional five swans.

	Skagit	Snohomish	Whatcom	TOTAL
Powerline suspect	7	3	8	18
Pb suspect	2	1	11	14
Trauma	1	1		2
Unknown	4		3	7
Feather Pile	2	1		3
TOTAL	16	6	22	44

Winter Marine Waterfowl Surveys: Assistant District Biologist Cyra, Waterfowl Survey and Sea Duck Specialist Evenson, and Assistant District Biologist Murphie completed the second

week of the winter sea duck and marine bird aerial surveys of the inner marine waters of Washington State. This is the 22nd winter that these surveys have been conducted. These surveys are the longest data set documenting trends of winter marine bird distribution and population indices in the Puget Sound, documenting the declining trends in many of the species that inhabit the Puget Sound during the winter

season. In addition, these surveys are used to document population index levels of sea ducks that will be used to determine next year's harvest limits. A total of three days of survey were flown this week, about average for our turbulent winter weather. Data transcriptions were performed on no-fly days. We are fortunate again to retain the services of Kenmore Air and their chief pilot for these technically challenging surveys and they are a large part of the success of this project. Information on these surveys along with past data can be found at <http://wdfw.wa.gov/mapping/psamp/>.



Biologists completed the second week of the winter sea duck and marine bird aerial surveys of the inner marine waters of Washington State.



Wiser Lake Duck Mortality

Event: Biologist DeBruyn investigated the demise of at least 88 ducks at Wiser Lake which is a major waterfowl concentration area in Whatcom County. Although predominantly wigeon and mallards, there were a wide range of species represented. Samples sent to the National Wildlife Health Center showed symptoms of aspergillosis during a preliminary necropsy.



Some duck carcasses collected at Wiser Lake.

All carcasses were collected and disposed of to prevent

secondary exposure as well as facilitating collection of fresh samples for analysis. The area will be monitored to determine if further mortality is occurring.

Port Susan Canada Goose Game Reserve: Biologist Milner conducted a second Canada goose survey within the Port Susan Game Reserve in order to evaluate the need for the reserve to conserve the Vancouver sub-species of Canada goose. No Canada geese were observed during the survey.

San Juan Island National Historic Park Choosing by Advantages Workshop: Biologist Milner participated in a planning workshop for the park to consider alternatives for the Park's Prairie Stewardship Plan. Wildlife issues that were discussed include conservation of the Island Marble Butterfly and Sand Verbena Moth as well as consideration of the introduced European rabbit population.

Wildlife Areas

Fir Island Farm Final Design Project: Projects Coordinator Brokaw calibrated a water quality monitoring device that measures water temperature, depth and salinity. The device is a replacement for a device that malfunctioned at one of the groundwater monitoring sites adjacent to the Fir Island Farms Unit in the Skagit Wildlife Area. After calibrating, Projects Coordinator Brokaw installed it on the site, and it is currently taking water quality measurements at 15-minute intervals. These data will serve as a baseline, so that any change in groundwater conditions after implementation of the dike setback restoration project will be able to be documented.

Samish River Unit (Welts) Wetland Restoration: Projects Coordinator Brokaw, Manager Rotton, and Natural Resources Conservation Services (NRCS) staff had a conference call with the Project Manager at the Army Corps of Engineers (ACOE) to further discuss permitting needs for the project. The restoration elements of the project and the construction of the parking lot will

require separate permits from the ACOE, and WDFW and NRCS are considering making design modifications to expedite permitting as much as possible.

Monitoring: Natural Resource Tech Curran Cosgrove continued to monitor water levels, waterfowl and public use on the Island, Headquarters, Samish, Leque Island and Debay's Slough units. Most units checked still have good amounts of available seed in the field which is encouraging for late-season waterfowl use.

Swan Management: Natural Resource Technicians Deyo and Otto captured and euthanized two sick swans near Lynden and transported to LaConner. Technician Otto also recorded one power line strike by a swan near Everson and notified District14 staff and Puget Sound Energy.

GOAL 2: PROVIDE SUSTAINABLE FISHING, HUNTING AND OTHER WILDLIFE-RELATED RECREATIONAL AND COMMERCIAL EXPERIENCES

Wildlife Management

North Puget Sound Snow Goose Survey: Biologist Danilson corresponded with the contractor who is completing the automated counts of the snow goose survey completed on December 4. Danilson also completed manual counts of a couple snow goose flocks from this survey to verify that the automated was accurate. Additionally, Danilson and Biologist DeBruyn made preparations for next snow goose survey which is scheduled for the week of December 23.

North Cascades Elk Herd Management: Biologist Danilson and Conflict Specialist Griffith attended an evening meeting of the agricultural damage committee of the North Cascades Elk Herd Management Group. A third party facilitator has been brought in to assist with this effort. However, there are still major struggles, disagreements, and trust issues which are precluding the group from focusing on addressing issues that can be addressed in the North Cascades elk herd plan update.

Wildlife Areas

Samish Unit (West-90) Project: Project Coordinator Brokaw and Specialist Meis met with Ducks Unlimited (DU) and the drainage modeling consultant for the project to discuss the results of the drainage model. DU is considering having the consultant complete an additional model to further analyze drainage of the site. Results from the models inform the design elements that DU and WDFW will incorporate as part of the project, which involve holding water on the site to improve waterfowl habitat and hunting opportunities.

Private Lands/Access

Waterfowl Quality Hunt Survey: Natural Resource Technicians Otto and Deyo and Biologist Caldwell monitored quality hunt sites for use, identifying any maintenance needed or issues to address.

GOAL 3: PROMOTE A HEALTHY ECONOMY, PROTECT COMMUNITY CHARACTER, MAINTAIN AN OVERALL HIGH QUALITY OF LIFE, AND DELIVER HIGH-QUALITY CUSTOMER SERVICE

Wildlife Management

Skagit County Elk Conflict: Conflict Specialist Griffith met with several landowners along the Skagit River and Acme this week in response to elk complaints. Griffith issued out a number of damage permits and damage prevention cooperative agreements.

Conflict Technician Kyle Pinjuv continued to work on the elk fencing project near Birdsview.

Wildlife Areas

Leque Island Alternatives Analysis and Design Project: Projects Coordinator Brokaw, Wildlife Biologist Milner, Habitat Biologist Hennick, and Ducks Unlimited met with a third-party facilitator to plan goals and an agenda for the upcoming Stakeholder Committee meeting on January 8.

DeBay Slough: Manager Rotton met with a neighboring land owner to discuss potential access opportunities for wildlife area staff and potential lease opportunities of WDFW agricultural land. Staff posted additional Game Reserve signs onsite. There have recently been reports of people walking dogs on the reserve.

Agricultural lease program: Manger Rotton met with Western Washington Agriculture Association Director Brandon Roozen to discuss agriculture community concerns regarding public land ownership and management.

Private Lands/Access

Hunter Concerns: Biologist Caldwell responded to several hunter complaints regarding reservation concerns. Most of the concerns were regarding the three week reservation lag time for reservation placement, map errors and webpage errors/corrections. Biologist Caldwell contacted all hunters and worked with appropriate staff to resolve all issues related to the complaints.

GOAL 4: BUILD AN EFFECTIVE AND EFFICIENT ORGANIZATION BY SUPPORTING OUR WORKFORCE, IMPROVING BUSINESS PROCESSES, AND INVESTING IN TECHNOLOGY

Wildlife Management

Aircraft Safety: Assistant District Biologist Cyra continued with equipment acquisition and preparation for the ongoing winter waterfowl aerial surveys.

Radio Training: Assistant District Biologist Cyra assisted staff with obtaining radio training, answering questions, and assigning radio call numbers.

Private Lands Access Program Management: Biologist Caldwell coordinated agendas with technician staff pertinent to program goals and objectives. Furthermore, Biologist Caldwell summarized, averaged and totaled contract information on forage (acres, units and cost), payable sites (acres, units and cost), non-cost sites (acres, units and cost), and total cost distribution from 2009 to present.

Wildlife Program Meeting: Lands Division staff attended the Lands Program meeting in Wenatchee. The meeting focused on upcoming planning efforts and land management issues and opportunities.

REGION 5

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

Wildlife Management

Region 5 Deer Management: Biologists Holman, Bergh, Stephens and George conducted aerial post-season deer surveys over Klickitat County. Biologists Anderson and Bergh conducted flight-following during the flying. The surveys covered portions of all three Klickitat County Game Management Units, (578-West Klickitat, 388-Grayback and 382-East Klickitat). The data generated from this survey are used to evaluate the current hunting season structure and monitor the population in consideration of the post-season buck to doe objective of 15-19 bucks per 100 does outlined in the Game Management Plan. A total of 1,612 deer were observed during the effort. Additional survey results will be posted on future Weekly Reports and included in the annual Region 5 section of the Game Status and Trend Report.

Wildlife Areas

Klickitat Wildlife Area -- Fire Hazard Reduction: Technician Davis started cutting shrubs (fine fuels) along the Anderson Road on the Soda Springs Unit as part of the program to strengthen and maintain this corridor as a wildfire fuels break.

GOAL 2: PROVIDE SUSTAINABLE FISHING, HUNTING AND OTHER WILDLIFE-RELATED RECREATIONAL AND COMMERCIAL EXPERIENCES

Wildlife Management

Southwest Washington Management Area 2A and 2B Goose Hunt: The 2013-2014 Southwest Washington goose hunting season resumed on December 11, 2013. To date, 427 hunters have checked in 892 geese at a rate of 2 geese per hunter. All zones continue to remain open for management area 2A. For information regarding up-to-date zone closures, hunters can call the Region 5 office at (360) 696-6211 and follow the menu options for hunting and

waterfowl. As a reminder, Management Area 2A will be closed to goose hunting on Wednesday December 25, 2013, and Wednesday January 1, 2014. Thank you for your cooperation during the holiday season. Hunters interested in goose hunting in Area 2A, can refer to pages 16, 19 and 20 of the Migratory Waterfowl and Upland Game Season Pamphlet or check online at <http://www.wdfw.wa.gov/publications/01535/wdfw01535.pdf> for further details regarding requirements for participation.

Private Lands/Access

Sign Replacement: Many gunshot damaged WDFW “Feel Free to Hunt” signs were replaced at several private timberland gates in east Klickitat County.

Kress Lake: Access staff Spangler and Rhodes walked the lake trail and found numerous beaver damaged trees. Some were fallen and others that would eventually fall. Trees were wrapped with wire fencing around the base of the trees to stop the damage.



Beaver damaged trees.



Sportsman Loop East: Access staff Spangler and Rhodes arrived to find the gate at the access site had been damaged and would not open. It looked like a vehicle ran into it and bent the steel tubing. Spangler and Rhodes hooked a chain and winch cable on the truck and were able to bend the steel back to working order.

Sportsman Loop east gate repair.

GOAL 3: PROMOTE A HEALTHY ECONOMY, PROTECT COMMUNITY CHARACTER, MAINTAIN AN OVERALL HIGH QUALITY OF LIFE, AND DELIVER HIGH-QUALITY CUSTOMER SERVICE

Wildlife Management

Wildlife Conflict: District Biologist Anderson and Conflict Specialist McDonald met with two of the Klickitat Livestock Producers involved in WDFW's Damage Prevention Cooperative Agreement Program. A total of eight individual livestock owners currently have contracts with WDFW to develop a program to minimize cattle/predator interactions through improved herd management. This pilot program was initiated in early 2013 and is a cooperative arrangement between the agency and livestock producers to better prevent wildlife/livestock interactions.

Biologist Stephens and Conflict Specialist McDonald met with three BZ Corner Area landowners that have experienced elk damage annually for the last 4-5 years. The landowners expressed their concerns, and proactive measures were discussed.

Winter Conditions

District 10 and Mount St. Helens Wildlife Area Winter Conditions

Past Weather: November temperatures and precipitation were below normal. There was little snowfall or accumulation below 3,000 feet until the first week in December, when arctic air arrived lowering temperatures to well below normal for the time of year. Most areas between 2,500 feet and sea level only received a trace to a couple of inches of snow in December during two snowfall events.

Short-Term Forecast: Snow levels will range from 3,000 to 6,000 feet for the upcoming week. The 6-10 and 8-14 day forecast both predict below normal temperatures and precipitation.

Long-Term Forecast: The January forecast is for an equal chance for either above average, below average, or normal temperatures and precipitation. The three month forecast predicts below normal temperatures and an equal chance for above average, below average, or normal precipitation.

Habitat: Forage is available at all mid to lower elevations, with much of the landscape being snow free below 3,000 feet.

Snow Depths: Areas of low elevation are snow free, with there being only minimal snow in elevations above 3,000 feet.

Animal Concentrations: No unusual concentrations noted to date. The first monthly winter elk survey was conducted on December 5. A total of 100 elk were observed on the Mt. St. Helens Wildlife Area.

Animal Condition: No reports of animals in poor condition that can be attributed to winter conditions. Animals observed to date appear to be in good condition.

Mortality: None reported.

Public Contacts: None to report regarding winter conditions. *The Public is reminded the portion of the Mt. St. Helens Wildlife Area lying east of a line defined by Hoffstadt Creek, The North Fork Toutle, and Deer Creek is closed to public access through April 30, 2014, to minimize disturbance and associated energy demands on elk wintering there.*

District 9 Winter Conditions

Past Weather: Precipitation in the South Cascades continues to be below normal for this time of the year as snowpack is around 51% of normal as recorded at the Washington SNOTEL Snow/Precipitation site on Potato Hill near Mt Adams. Most snow accumulation is currently above 5,000 feet. Temperatures are still cold this week with little precipitation.

Winter Severity: Elevations below 5,000 feet are generally open throughout the District on both the west and east side of the Cascades. There is no concern for the current severity of the winter conditions on big game populations in Skamania County and the western portion of Klickitat County. Those portions of Klickitat County east of Rock Creek have no snow accumulation and deer are in good condition.

Habitat: Habitat is open and forage habitat continues to be available throughout District 9.

Animal Concentrations: Deer are bunched in normal concentrations in good habitat east of Highway 97.

Animal Condition: Deer and elk appear to be in good condition and no winter stress/mortality has been reported except for typical road kills.

Mortality: None documented this week.

Public Contacts: No concerns raised by the public this week.

MOUNT SAINT HELENS ELK HERD
 2013/2014 WINTER CONDITIONS - SNO-PARK SNOW DEPTH,
 NRCS SNOTEL DATA, AND SNOWPACK

From web page <http://www.fs.usda.gov/activity/giffordpinchot/recreation/wintersports/?recid=31178&actid=91>
http://www.wrcc.dri.edu/cgi-bin/sno_narr3.pl
<http://www.wcc.nrcs.usda.gov/snotel/Washington/washington.html>

SNOWPARKS:									
Name	Elevation		12/6/2013	12/13/2013	12/20/2013	12/27/2013	1/3/2014	1/10/2014	1/17/2014
MARBLE MT	2,700'		No report	4" new snow	No new report				
WAKEPISH	2,800'		No report		1-2" snow				

SNOWTEL STATIONS:									
Name	Elevation	Stats	11/30-12/6	12/7-12/13	12/14-12/20	12/21-12/27	12/28-1/3	1/4-1/10	1/11-1/17
		Avg Snow							
JUNE LAKE	3,340'	Depth (inches)	0.66	5	5.3				
		Min Temp (F)	14	19	23				
		Max Temp (F)	45	27	50				
		Avg Temp (F)	30	22	36.2				
		Year to date precipitation (inches)	27	27	27.7				
		Avg Snow							
SPIRIT LAKE	3,520'	Depth (inches)	2.43	3	0.86				
		Min Temp (F)	11	18	21				
		Max Temp (F)	46	27	52				
		Avg Temp (F)	29	25	36.8				
		Year to date precipitation (inches)	17.5	17.9	18.3				
		Avg Snow							
PEPPER CREEK	2,140'	Depth (inches)	0.31	2	0.3				
		Min Temp (F)	14	16	24				
		Max Temp (F)	48	26	46				
		Avg Temp (F)	31.5	22	34.5				

Year to date
precipitation
(inches) 13.1 13.5 13.6

Name	Elevation	Stats	11/30-12/6	12/7-12/13	12/14-12/20	12/21-12/27	12/28-1/3	1/4-1/10	1/11-1/17
SHEEP CANYON	3,990'	Avg Snow							
		Depth (inches)	4		7				
		Min Temp (F)	12		20				
		Max Temp (F)	43		50				
		Avg Temp (F)	26		35.3				
		Year to date precipitation (inches)	23.1		24.4				

Name	Elevation	Stats	11/30-12/6	12/7-12/13	12/14-12/20	12/21-12/27	12/28-1/3	1/4-1/10	1/11-1/17
CALAMITY	2500'	Avg Snow							
		Depth (inches)	1	5.5	0.1				
		Min Temp (F)	16	18	27				
		Max Temp (F)	47	27	55				
		Avg Temp (F)	31	23	39.2				
		Year to date precipitation (inches)	18.8	22	20.3				

Snowpack % of Avg Snow Water Equivalent	12/6/2013	12/13/2013	12/20/2013	12/27/2013	1/3/2014	1/10/2014	1/17/2014
JUNE LAKE	5%		13%				
SPIRIT LAKE	122%		100%				
SHEEP CANYON	20%		20%				

REGION 6

None.