

FISH AND WILDLIFE

INTERIM FIVE YEAR MANAGEMENT PLAN
2012-2017

CONFEDERATED TRIBES OF THE COLVILLE RESERVATION PLAN
FOR INTEGRATED RESOURCE MANAGEMENT

October 2012

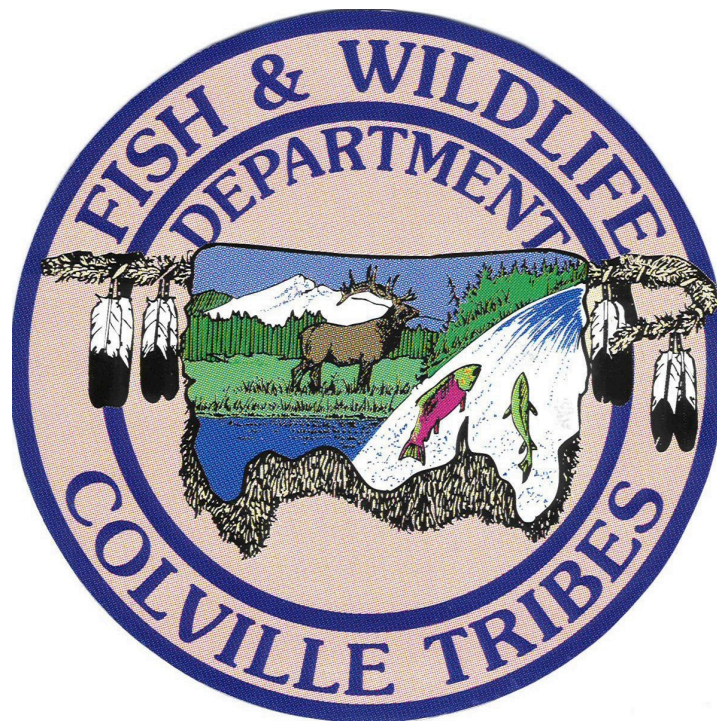


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INTRODUCTION

A scoping process was implemented early on in development of the Colville Tribes Integrated Resource Management Plan (IRMP) (CCT 2000) to identify the Tribal Membership's vision for the present and future management of their resources. The results of these visioning sessions formed the basis for the Tribes Holistic Goal for Management of the Reservation, enacted in 1996 by Colville Business Council Resolution #1996-23 (Figure 1).

Confederated Tribes of the Colville Reservation
HOLISTIC GOAL

Quality of Life

We want to maintain and build upon our unique culture, traditions, language, sovereignty and history; we want a healthy society, environment and economy; we will treat everyone with honor and respect, having the freedom to worship, live, work and play as we choose, accepting each others diversity/uniqueness. We want to provide plentiful/affordable housing, meaningful/secure employment and educational opportunities. We want communities that are clean, self-sufficient, safe, wholesome and provide opportunities for family based recreation.

Forms of Production

We will support our quality of life through sustainable wealth from diverse income opportunities, without waste or sacrifice of tradition, culture and values; we will emphasize the importance of involving the membership in developing their communities; we will provide opportunities/infrastructure to increase understanding/awareness of our culture, traditions, language, sovereignty and history throughout our communities, schools and workplaces, continuously promoting honor, respect and diversity.

Future Resource Base

We are and continue to be a self-sustaining sovereign entity; having flourishing enterprises; having healthy productive landscapes including rangelands, croplands, forests, riparian areas, streams and lakes; tribal decisions will include protection of tradition, culture, and aesthetic values; we will continue to provide improved/enhanced opportunities to communities/schools/workplace to increase understanding and awareness of our culture, values, tradition, language, sovereignty and history.

The reservation remains as a rural life-style and the population is in balance with an effective water, mineral, and energy cycle with biodiversity resulting in an abundance of culture, medicinal and edible plants, clean air and water, springs and streams that flow year round, large trees, wildlife, fish and insects.

--CCT Business Council Resolution 1996-23

Figure 1. Holistic Goal: Confederated Tribes of the Colville Reservation.

The visioning process, as well as public and agency issue scoping for development of the Tribes IRMP and FEIS (CCT 2000), also contributed to the identification of seventeen broad goal statements pertaining to the desired future conditions (DFC) for the Colville Reservation (Klock 2001). These goals are also applicable to management of the boundary waters of the Colville Reservation, the area known as the “North Half”, and the Tribes’ other historical Usual and Accustomed (U&A) areas – they are:

Visioning Goals

1. Wetlands, riparian, and aquatic ecosystems continue to function as natural systems (DFC #3, Klock 2001);
2. An abundance of anadromous and non-anadromous salmonids and other species the Tribes desire continues in the waters of the Reservation (DFC #9, Klock 2001);
3. Suitable habitat conditions for desirable native and non-native species (flora and fauna) exist to maintain Reservation biodiversity that includes the diversity of natural genes, species and ecosystems, as well as the evolutionary process that link them (DFC #6, Klock 2001);
4. Viable populations (numbers and distribution of reproductive individuals) of native and desired non-native species of wildlife, and their supporting habitats are maintained, while wildlife is provided in sufficient numbers to meet the cultural, subsistence and recreational needs of Colville Tribal Members (DFC #8, Klock 2001);
5. Culture, traditions and practices remain in the personal, social, economic, spiritual and political aspect of the lives of the Reservation’s membership (DFC #4, Klock 2001);
6. Tribal Members’ values are clearly stated and reflected in the management of their resources (DFC #10, Klock 2001);
7. The landscape is producing a viable short-term and long-term economic stability for the Tribal Membership (DFC #15, Klock 2001);
8. Non-Reservation sources of revenue continue from other government entities and private enterprises to assist in managing the landscape for producing short-term and long-term economic stability on the Colville Indian Reservation (DFC #16, Klock 2001).

Mission Statement

Maintain and protect viable populations (numbers and distribution of reproductive individuals) of native and desired non-native species of fish and wildlife, and their supporting habitats, while providing sufficient numbers to meet the cultural, subsistence, recreational and economic needs of the Tribal Membership.

The Colville Fish and Wildlife Resource Management Plan, herein called “Plan” contains a set of overall management strategies, goals, and objectives designed to fulfill the Tribe’s Holistic Goal for the Reservation and its fish and wildlife resources (CBC Resolution #1996-23). The basis of the Plan is the IRMP (CCT 2000) and it is an integral part of the Plan for Integrated Resource Management (PIRM) (Klock 2001). The strategies contained within the Plan have been designed to achieve the Tribal Memberships vision for the future – the DFC.

The Plan also provides direction and a schedule for the development of fifteen (15) site-specific fish and wildlife Resource Management Unit (RMU) plans as identified in the Tribal PIRM (Klock 2001, p. 22). RMU plans, when completed, will become addendums to this plan. RMU plans will be based on information collected during the assessment regarding the current status of each RMU and management actions that are needed to reach the DFC.

The goals, objectives and tasks that align to the mission statement are contained within this plan and have been formulated to guide management of the fish and wildlife resources under the Tribes’ Holistic Management Goal and are in compliance with direction set forth in the Tribes’ PIRM. However, it is important to realize that management of fish and wildlife resources requires predictable and adequate funding to support professional staff and to implement management strategies.

Most of the Department’s funding comes from sources outside the Tribes, in the form of Federal and State grants and contracts. These funds are relatively short-term, project specific and have specific constraints on how they are to be expended. Membership has decided what is important for present and future management of the fish and wildlife resources, but without continued assured economic support, the Fish and Wildlife Department will be unable to attain all the strategic objectives identified in this plan, which are:

Strategic Objectives

- SO #1. Ensure the sound management of fish (anadromous, resident and desired non-native), wildlife (native and desired non-native), and habitat resources (restoration, enhancement, and protection) within the external boundaries of the Colville Reservation and on the North Half and within the Tribes’ U&A areas, where applicable;
- SO #2. Inform Tribal Membership about the F&W programs, projects and benefits of healthy, diverse, and sustainable fish and wildlife populations while supporting traditional cultural and subsistence needs;
- SO #3. Support, train and promote personnel within the F&W ensuring policies, procedures, laws and regulations developed for the F&W are followed (tribal, federal and state laws and regulations) when and where applicable;
- SO #4. Work cooperatively and establish relationships with internal and external stakeholders to provide the best possible resource management for the Tribal Membership.

FISH AND WILDLIFE MANAGEMENT PLAN

Within this management plan, each of the Strategic Objectives has goals that are organized into sections for Administrative Departmental Goals (ADG), Resident Fish Goals (RFG), Anadromous Fish Goals (AFG), and Wildlife Goals (WLG). Objectives (O) have been developed under each section's goals. Tasks (t) to achieve these objectives have been identified under each objective. Quantifiable "performance measures" have been established for each objective and/or tasks, as appropriate.

ADMINISTRATIVE DEPARTMENT GOALS, OBJECTIVES, TASKS

SO #1. Ensure the sound management of fish (anadromous, resident and desired non-native), wildlife (native and desired non-native), and habitat resources (restoration, enhancement, and protection) within the external boundaries of the Colville Reservation and on the North Half and within the Tribes' U&A areas, where applicable.

ADG 1. Provide strategic oversight and daily administrative support for Anadromous, Resident Fish, Wildlife and Administrative Divisions for F&W.

AD Objective 1.1. Oversee and participate in the management of Administration, Anadromous, Resident Fish and Wildlife Divisions

AD Objective 1.1 Tasks:

- 1.1.1 *Management of fishing, hunting and trapping activities will be in accordance with the requirements of Colville Tribal Code Chapter 4-1 (Fish, Wildlife and Recreation).*
- 1.1.2 *Conduct meetings such as monthly Senior Management, quarterly reviews, and Annual Program Review for each respective F&W divisions.*

AD Objective 1.2. Secure and maintain annual funding to implement the Fish and Wildlife Department's Management Plan, and to fund the various projects identified for the resources of the Colville Reservation, Boundary Waters, Ceded lands, and U and A Areas.

AD Objective 1.2 Tasks:

- 1.2.1 *Develop and maintain a current list of potential funding organizations, agencies and grant opportunities.*
- 1.2.2 *Submit annual funding proposals leveraging cost share and partnerships, where feasible.*
- 1.2.3 *Administration will assist project leads with planning, implementation and evaluation of contract proposals including budget preparation, negotiations of agreements, signature routing, approval process, chart of accounts, and other special requests as needed.*

- 1.2.4 *Monitor and track all expenses associated with funds ensuring proper compliance with all funding sources.*
- 1.2.5 *Submit timely reports as required by statement of work (SOW) including up-to-date invoicing.*
- 1.2.6 *Modify and change grants and (sub) contracts as needed.*
- 1.2.7 *Accounting team will provide accurate fund reporting to management, project leads, supervisors and other interested parties to include monthly financial statements (cuff reporting, invoicing, purchase orders, payroll, leave balances, property insurance, utilities and other requests).*
- 1.2.8 *Ensure timely closing of all funds to include year-end journal entries, accrual, reports, final invoicing and assessment of technical progress and performance.*
- 1.2.9 *Develop and maintain an effective records management system for all contracts/grants received.*

AD Objective 1.3. Participate in fisheries and wildlife habitat enhancement through coordinated and cooperative planning processes, including implementation of the sub-basin and water body specific (lakes, rivers, reservoirs) plans.

AD Objective 1.3 Tasks:

- 1.3.1 *Develop and submit for funding, project proposals consistent with existing or desired management objectives that benefit fish and wildlife populations and habitats on the Reservation, Ceded Lands, Boundary Waters and the Usual and Accustom areas (U and A).*
- 1.3.2 *Participate in management decisions pertaining to reservoir elevation and reservoir water retention time, ensuring sufficient flows necessary to reduce entrainment of juvenile salmonids is met. Based on MOA accord.*
- 1.3.3 *Strongly advocate maintaining total dissolved gases saturation in hydropower reservoirs at levels necessary to avoid harm to aquatic life.*
- 1.3.4 *Maximize elevation and water retention times in Lake Roosevelt to increase rearing capacity (i.e. forage base- zooplankton, benthic invertebrates, and terrestrial insects).*
- 1.3.5 *Assess passage barriers within reservation and identify sites that require barrier removal and apply for funding for removing undesirable passage barriers as funding permits.*

AD Objective 1.4. Ensure that anadromous and resident fish and wildlife impacts (populations and habitat) associated with the construction and operation of federally operated and /or federally regulated hydropower projects are mitigated to the full extent required under the law (Northwest Power Act and Columbia River Habitat Conservation Plans, and Biological Opinions).

AD Objective 1.4 Tasks:

1.4.1 Continue yearly funding requests for fish restoration and mitigation efforts through the Northwest Power and Conservation Council (NPCC).

AD Objective 1.5. Complete land acquisition required for mitigation of wildlife, anadromous and resident fish habitat losses associated with the Chief Joseph and Grand Coulee hydropower projects.

AD Objective 1.5 Tasks:

1.5.1 Submit completed land acquisition packages to Bonneville Power Association (BPA) for funding.

1.5.2 Resident Fish riparian land acquisition will begin in 2018.

1.5.3 Secure funds for operational losses by 2018.

AD Objective 1.6. Secure long term contract funding for Mitigation Site Operation, Maintenance, Monitoring and Evaluation, as specified in Site Management Plans.

AD Objective 1.6 Tasks:

1.6.1 Work with Bonneville Power Association (BPA), U.S. Army Corps. of Engineers (USACE), and the NPCC to secure funding for operation and maintenance activities on mitigation properties for Wildlife, Anadromous and Resident Fish programs.

AD Objective 1.7. Support and defend the Tribes' historical and sovereign right to hunt, fish and gather on the "Ceded Lands", the "Usual and Accustomed (U and A) Areas" and the "Colville Indian Reservation", and protect these resources for the benefit of the Tribal Membership.

AD Objective 1.7 Tasks:

1.7.1 Identify and obtain access to Ceded Lands and U&A areas.

1.7.2 Coordinate and negotiate annually with appropriate State and Federal management agencies to re-gain Tribal hunting, gathering, fishing and access rights in the Tribes' U & A areas. (Appendix II)

(Update map work with History and Archaeology Department (H&AD), Office of Reservation Attorney (ORA), add definitions of ceded North Half. Washington

Department Fish and Wildlife (WDFW) (Wells dam), US Fish and Wildlife Service (USFWS) (Icicle), National Oceanic and Atmospheric Administration (NOAA), US Bureau of Reclamation (BOR), and USACE).

- 1.7.3 *Participate with Tribal, State, and Federal agencies in the management of fish and wildlife species within the Colville Reservation boundary waters, North Half (ceded area) and within the Tribes' U and A areas.*

AD Objective 1.8. Continue annual participation in fish and wildlife resource agreements, such as the Timber-Fish-Wildlife (TFW) Agreement, the State-Tribal Hunting Fishing Agreement, Forest and Fish Agreement (FFA), Harvest Allocation Agreement, Park Enforcement Agreements, Rufus Woods Agreement, as funding permits (Appendix IV)

AD Objective 1.8 Tasks:

1.8.1 *Coordinate and negotiate Forest Practices within the precepts of the TFW agreement to protect, enhance, monitor, and evaluate Fish and Wildlife and Cultural resources as they apply to the North Half, the U and A areas, and fee lands within the Reservation boundary.*

1.8.2 *Participate in the Adaptive Management, regulatory, rulemaking and legislative processes associated with the development of Washington forest practice regulations.*

AD Objective 1.9. Maintain the legal rights and entitlements associated with the 1891 Agreement between the Tribes and the United States Congress, North Half reserved rights recognized in the *Antoine* decision (1974), and the hunting/fishing of the Wenatchi Icicle fishing, and Arrow Lakes / Okanogan B.C.

AD Objective 1.9 Tasks:

1.9.1 *Maintain the right of the Tribal Government to regulate hunting, fishing and gathering activities, off Reservation, by Tribal Members.*

1.9.2 *Provide annual review and comment on proposed State Hunting and Fishing Regulations.*

AD Objective 1.10. The Department will utilize best available science in implementation of an adaptive management strategy to achieve the IRMP's Desired Future Conditions on the Colville Reservation.

AD Objective 1.10 Tasks:

1.10.1 *Implement Reservation wide and project specific monitoring plans.*

1.10.2 *Adhere to contractually obligated monitoring and reporting requirement for on-going and future projects.*

- 1.10.3 *Develop Monitoring and Evaluation Plans, as required by the IRMP (Appendix 10), which appendix 10 only talks about Forestry Management Plans and should include the other Resources such as F&W, Range, Fire, Environmental Trust, and Cultural Resources.*
- 1.10.4 *Current BPA funding mandates us to monitor and evaluate our current projects. Seek additional funding to utilize the IRMP efforts. Use the current M&E efforts to incorporate and integrate with future integrated efforts. Develop funding and staffing thresholds required to implement monitoring and evaluation activities.*
- 1.10.5 *Incorporate integrated monitoring activities into employee work plans, as time is available. All BPA Projects will have an M&E component in accordance with BPA guidelines.*
- 1.10.6 *Data gathered from M&E of on-going or past projects or best management practices from outside sources should be utilized in the development of a monitoring plan. Plans should be developed using BPAs comprehensive and integrative design system (STRIDE, which stands for Spatial, Temporal, Response, and Inference Design). Employing the 7-Step concept described in (Peters and Ward 2003), which emphasizes that the design and implementation of a monitoring program is an iterative process involving a series of linked steps.*

AD Objective 1.11. The Department will propose, implement, participate in, or support fish and wildlife management and research projects that contribute to the benefit of the Tribal Membership and the achievement of Desired Future Conditions.

AD Objective 1.11 Tasks:

- 1.11.1 *Identify and propose applied research needed for management of anadromous, resident fish, wildlife and/or their habitat.*
- 1.11.2 *Identify and propose applied research needed to improve results of species augmentation and maintenance through hatchery programs.*
- 1.11.3 *Identify and propose applied research needed for the management of Threatened and Endangered, game and non-game fish and wildlife species and/or their habitats.*
- 1.11.4 *Professional staff will synthesize research findings as reported in current scientific literature, to test management assumptions.*
- 1.11.5 *Recommend modifications to management strategies will be advanced through the Tribal 3-P process.*

- 1.11.6 *The Department sought funding to develop and implement a geodatabase model for management of fish and wildlife resource and habitat data. All data can be geographically referenced so it can be used for GIS and statistical analysis. Project is almost complete for F&W. Next phase is to operate, train staff and make reports available to tribal membership.*

AD Objective 1.12. The Office of ESA management will manage the CCT Columbia River Accords (MOA).

AD Objective 1.12 Tasks:

- 1.12.1 *Maximize fiscal accountability and flexibility through budgetary tracking.*
- 1.12.2 *Monitor the department's progress toward ESA recovery.*
- 1.12.3 *Track the successful implementation of fish and wildlife mitigation measures.*
- 1.12.4 *Assist the department project managers in successfully implementing the MOA projects within the Anadromous Fish, Resident Fish and Wildlife divisions.*

SO# 2. Inform Tribal Membership about the F&W programs, projects and benefits of healthy, diverse, and sustainable fish and wildlife populations while supporting traditional cultural and subsistence needs.

ADG 2. Educate Tribal Membership about the F&W programs, projects and benefits of the fish and wildlife populations.

AD Objective 2.1. Provide the Membership and general public with current information and encourage involvement on fish and wildlife management programs and research.

AD Objective 2.1 Tasks:

- 2.1.1 *Inform Tribal Membership of current F&W reports, activities, project updates, and regulations through the Tribal Tribune, local newspapers, websites, social media, membership meetings and tradeshows.*
- 2.1.2 *F&W staff will participate in organized school presentations where feasible to provide education and outreach services.*
- 2.1.3 *Continue Public Relations work for F&W projects that include newsletters, articles, fact sheets, brochures, posters, and written reports.*
- 2.1.4 *Conduct seminars, community meetings and hatchery tours to make fish and wildlife conservation programs and education easily accessible to the Tribal Membership and general public.*

- 2.1.5 *Continue to develop and provide outreach programs for the community such as Owhi Days, Sunflower Festival, Earth Day, Local Fishing Derbies and Mill Pond Days.*

AD Objective 2.2. Increase Tribal Member involvement in Fish and Wildlife Management decisions.

AD Objective 2.2 Tasks:

- 2.1.1 *Conduct public meetings and workshops as needed, to inform the Tribal Membership on Departmental proposals (plans, season regulations), and to encourage public review and comment.*
- 2.1.2 *Post special event notices using the Tribal information system.*

AD Objective 2.3. Develop and maintain opportunities for Tribal Members to participate in fish and wildlife management activities.

AD Objective 2.3 Tasks:

- 2.3.1 *The Department will continue to offer job experience to Tribal Members via participation in the Temporary Aide for Needy Families (TANF) and summer youth/college internship programs.*

AD Objective 2.4. Obtain and secure funding to promote hunting, fishing, trapping and gathering education programs for Tribal youth with two (2) full time staff positions.

AD Objective 2.4 Tasks:

- 2.4.1 *Continue to solicit funds to implement and maintain hunter education programs through school visits and community involvement programs (i.e. 4-H groups) that include both Tribal Enforcement and F&W participation.*
- 2.4.2 *Promote “Traditional and Ethical” hunting, fishing, trapping and gathering methods, as practiced by our “elders”, in each district.*
- 2.4.3 *Develop and implement a “Volunteer Educator” program to assist in Youth Education programs.*
- 2.4.4 *Conduct special events such as Archery Proficiency Tests and Turkey Shoots.*

SO #3. Support, train and promote personnel within the F&W ensuring policies, procedures, laws and regulations developed for the F&W are followed (tribal, federal and state laws and regulations) when and where applicable.

ADG 3. Employ well-qualified professional and support staff to successfully implement Department programs and projects.

AD Objective 3.1. Secure adequate funding to maintain and expand F&W staffing needs on an annual basis.

AD Objective 3.1 Tasks:

- 3.1.1 *Maintain a current F&W organizational chart to identify chain of command and positions needed by the Department to fulfill its contractual obligations and to meet the needs of the Tribal Membership.*
- 3.1.2 *Track and monitor wage and salary information in current contracts to ensure staff needs are met.*

AD Objective 3.2. Develop a highly qualified technical and professional staff to support the mission of the F&W.

AD Objective 3.2 Tasks:

- 3.2.1 *Develop and implement employee development plans for all F&W staff members to increase their skill and performance levels based on identified competencies.*
- 3.2.2 *Develop annual work plans for all staff describing tasks to be accomplished and performance requirements.*
- 3.2.3 *Conduct annual employee performance reviews, with follow-up reviews as needed, to document performance and identify areas where improvement is needed.*
- 3.2.4 *Provide an opportunity to each Department employee to attend at least one professional conference or workshop each year.*
- 3.2.5 *Develop and implement a succession management plan for all levels of the F&W.*
- 3.2.6 *Provide instruction to staff on the history of CCT – cultural, traditional and legal status.*
- 3.2.7 *Compile and utilize a detailed orientation package for new and existing staff to include legal context including statutory and case law, F&W history, current events, regulations, policies and procedures, organizational structure and any other information relevant to specific divisions, sub-divisions or projects.*

AD Objective 3.3. Increase the number of Tribal Members employed by the Fish and Wildlife Department, as funding allows.

AD Objective 3.3 Tasks:

- 3.3.1 *Continue the leadership internship program for professional and technical positions within the F&W.*
- 3.3.2 *Provide assistance and support to Tribal Members seeking internships and educational opportunities outside of the F&W.*
- 3.3.3 *Develop training and skill building opportunities that can be cost shared with the TANF and TERO program for future employment of Tribal Members.*
- 3.3.4 *Provide scholarship funding as available to Tribal Members pursuing education related to fish or wildlife management.*

AD Objective 3.4. Develop and begin implementation of a management and maintenance plan for each Department facility. Facilities include the Fish and Wildlife office, satellite buildings and grounds; mitigation properties and associated houses and outbuildings.

AD Objective 3.4 Tasks:

- 3.4.1 *Assign program leads responsibility to develop facility management plans.*

AD Objective 3.5. Develop and implement an asset management plan for F&W.

AD Objective 3.5 Tasks:

- 3.5.1 *Administration will maintain an annual inventory of all F&W assets with the aid of the program managers.*
- 3.5.2 *Administration staff will assist project leads with proper accounting for property insurances.*
- 3.5.3 *Program managers will maintain motorized vehicles, including boats, snowmobiles, and off road vehicles in safe operating condition.*
- 3.5.4 *Equipment maintenance issues will be brought forward following chain of command.*
- 3.5.4 *Risk Management and Central Accounting will be notified on any additions, significant damage and/or removals of assets.*

AD Objective 3.6. Employees will be provided with a safe and healthy working environment.

AD Objective 3.6 Tasks:

- 3.6.1 *Occupational Safety and Health Administration (TOSHA) standards will be met for Department facilities.*
- 3.6.2 *F&W will comply with TOSHA standards to include attendance of safety meetings and trainings.*
- 3.6.3 *Use TOSHA approved inspection lists to address and maintain building safety standards.*
- 3.6.4 *Administration will implement a facility safety management program for the F&W.*

SO #4. Work cooperatively and establish relationships with internal and external stakeholders to provide the best possible resource management for the Tribal Membership.

ADG 4. Establish effective relationships with internal and external stakeholders.

AD Objective 4.1. Work cooperatively with external agencies to uphold agreements and contracts that are designed to manage the fish and wildlife resources of the Tribal Membership.

AD Objective 4.1 Tasks:

- 4.1.1 *Comply with all preexisting agreements within Departments of the CCT and between CCT and external agencies. (Appendices IV, XI).*
- 4.1.2 *Participate in reviews of proposed regulation code revisions on State and Federal level such as Hydrologic codes, fish consumption rates, and Biological Opinions.*
- 4.1.3 *Participate in Army Corp of Engineers Technical Management Team on Columbia River flows and dam operations (TMT).*
- 4.1.4 *Participate in Fish Passage Operations Management (FPOM).*
- 4.1.5 *Participate in Fish Passage Advisory Committee (FPAC).*
- 4.1.6 *Participate in Fish Flow Regulatory Advisory Group (FFRAG) for the Columbia River Water Management Plan (CRWMP) formally known as Columbia River Initiative (CRI).*
- 4.1.7 *Participate in International Coordination Group called the Trans-boundary Gas Group (TGG) for the control of Trans-boundary total dissolved gas.*

- 4.1.8 *Participate in Upper Columbia United Tribes (UCUT) monthly and special meetings for various issues.*

AD Objective 4.2. Work cooperatively with CCT Departments to fully implement the F&W mission.

AD Objective 4.2 Tasks:

- 4.2.1 *Develop F&W policies and procedures for contracts, accounting, purchasing, payroll, human resources and information technology ensuring collaboration with CCT departmental policies and procedures.*
- 4.2.2 *Review and make recommendations on requests for aquatic, hydraulic, research permits and land use and development permits by other divisions within the CCT departments such as Planning and Environmental Trust.*
- 4.2.3 *Participate in reviews of proposed regulation code revisions such as Land Use codes, Water Quality codes, Forest Practice codes, and Hydraulic codes.*
- 4.2.4 *Participate in Burned Area Emergency Rehabilitation (BAER) efforts for the stabilization or rehabilitation of fish and wildlife resources affected by wild land fire.*
- 4.2.5 *Provide annual workshops/training opportunities on fish and wildlife resource management for other Tribal Natural Resource Departments.*

AD Objective 4.3. The Fish and Wildlife Department will support Tribal Parks and Recreation, and Tribal Police Department officers in their efforts to enforce fish and wildlife regulations, and to maintain public safety.

AD Objective 4.3 Tasks:

- 4.3.1 *Meet with Tribal conservation officers and the Parks and Recreation Program to seek input on the development of annual hunting and fishing regulations.*
- 4.3.2 *Involve Tribal conservation officers and the Parks and Recreation Program in the distribution of regulation books to the Membership.*
- 4.3.3 *Notify conservation officers in a timely manner of potential violators and/or violations of the Tribal Fish & Wildlife Codes under their jurisdiction.*
- 4.3.4 *Investigate and report wildlife depredations occurring within the external boundary of the Reservation.*

- 4.3.5 *Notify conservation officers in a timely manner of the presence of approved non-Tribal research permits and researches that are working on the Reservation or boundary waters.*

AD Objective 4.4. Actively participate in the Tribes 3-P Process for all funded and approved projects.

AD Objective 4.4 Tasks:

- 4.4.1 *Assign staff from each division to review all relevant 3P information.*
- 4.4.2 *Develop collaborative management strategies which ensure integrated 3P review.*
- 4.4.3 *Work to incorporate habitat retention standards and guidelines contained within the IRMP and relevant Tribal Codes (Appendix III), as well as new findings from current scientific investigations, to ensure no net loss of habitat for priority species.*
- 4.4.4 *Foster equitable integration of Department management objectives with those of other Divisions, via routine communication on project proposals.*

RESIDENT FISH PROGRAM

The resident fish program of the Department plays an important role in providing subsistence fisheries for the Tribal Membership. Historically anadromous fish (salmon and steelhead) were the principal subsistence fishery, with resident fish playing a minor role. However, the construction of the Columbia River Dams resulted in a decline in anadromous fish availability and a significant loss of access to up-river spawning sites necessary for the sustainability of a subsistence anadromous fishery. Therefore, resident fish became a significant and necessary alternative as a subsistence resource because of the extirpation of anadromous fish above Chief Joseph and Grand Coulee dams.

RESIDENT FISH PROGRAM GOALS, OBJECTIVES, TASKS

SO #1. Ensure the sound management of fish (anadromous, resident and desired non-native), wildlife (native and desired non-native), and habitat resources (restoration, enhancement, and protection) within the external boundaries of the Colville Reservation and on the North Half and within the Tribes' U&A areas, where applicable.

Resident Fish Division Goals

RFG 1. Maintain and protect viable populations (of native and desired non-native species) of Resident fish and their supporting habitats.

RF Objective 1.1. Prepare by January 31st of each year an annual Fisheries Operation Plan including expected revenues and harvestable numbers of fish.

RF Objective 1.1 Tasks:

1.1.1 Management of fishing activities and use of fish both on and off Reservation will be in accordance with the requirements of Colville Tribal Code Chapter 4-1 (Fish, Wildlife and Recreation).

1.1.2 *Host an Annual Program Review (APR) to assess accomplishments of the strategic plan and establish current year goals and objectives (fall meeting).*

1.1.3 *Conduct quarterly meetings with project leads to review current year goals and objectives.*

RF Objective 1.2. Implement management practices that regulate the numbers of fish harvested by the Tribal Membership and the general public.

RF Objective 1.2 Tasks:

1.2.1 Continue associated harvest assessment, such as population and stock surveys, creel census, regulation development, and coordination with enforcement personnel.

1.2.2 Revise and publish Tribal Member and non-Member Fishing Regulation pamphlet annually by February 28th.

RF Objective 1.3. Manage for native and tribally listed priority fish species within the bounds of the Reservation (see Appendix VI).

RF Objective 1.4. Protect, rehabilitate and reestablish naturally spawning populations using integrated principles of genetic conservation, ecology, hatchery production, and fish management.

AD Objective 1.4 Tasks:

1.4.1 Minimize predation by non-native species on native and managed stocks.

1.4.2 Determine native species population status and feasibility to meet consumptive harvest needs as a self-sustaining population and/or applicability for artificial production to augment the fishery.

1.4.2 Develop a basin wide genetics inventory for priority streams on the Reservation.

1.4.3 Minimize immigration of non-native stocks to all interior reservation waters (discuss the role of brook trout).

RF Objective 1.5. Minimize mortality of wild and planted fish on the Reservation and boundary waters due to disease and contaminants.

RF Objective 1.5 Tasks:

- 1.5.1 Work cooperatively with Environmental Trust on the Lake Roosevelt Remedial Investigation and Feasibility Study to determine human and ecological risk and damages associated with the release of contaminants by Teck Cominco into the Upper Columbia River.*
- 1.5.2 Minimize the risk of transmitting disease from hatchery stocks to wild stock by following established hatchery protocols for fish health, reporting, and transportation of fish.*
- 1.5.3 Work cooperatively with other fish managers such as WDFW, USFW, and other Tribes to identify and monitor the spread of any disease into area waters.*
- 1.5.4 Work with Environmental Trust Department on permits and regulations of commercial net pen operations to ensure water quality, fish marking, and prevention of the spread of disease from commercial fish to wild and Tribal hatchery stocks.*
- 1.5.5 Minimize the risk to fish being planted by following established hatchery protocols for water temperatures when transporting and planting fish.*
- 1.5.6 Regulate the use of non-native species on the Reservation by issuing annual conditional permits for the importation of animals onto the Reservation under Tribal Code 4.4-300.*

Resident Fish Hatchery Goals

RFG 2. Tribal Hatchery Management will be defined by using programs of stable, cost effective artificial production to provide significant fishery benefits while having minimal adverse impacts on the long-term productivity of naturally spawning fish and their ecosystems.

RF Objective 2.1. Sustain quality subsistence and recreational fisheries in Reservation lakes and streams.

RF Objective 2.1 Tasks:

- 2.1.1 Purchase net pen fish for release in Reservation Lake dependent on availability and funding.*

- 2.1.2 *Maintain hatchery through capital improvements and maintenance of facility and vehicles.*
- 2.1.3 *Produce triploid rainbow trout for Reservation waters.*
- 2.1.4 *Produce eastern brook trout for release into select Reservation waters.*
- 2.1.5 *Produce Lahontan cutthroat trout for Omak and Duley lakes.*
- 2.1.6 *Perform public outreach to local schools, regional groups and the general public on the operations and functions of the hatchery.*
- 2.1.7 *Monitor and evaluate stocking needs in Reservation streams.*
- 2.1.8 *Monitor and evaluate Reservation Lakes to determine the optimum stocking level and strategy for each lake.*
- 2.1.9 *Creel Reservation lakes to determine angling pressure and success.*
- 2.1.10 *Mark and tag hatchery fish to differentiate between hatchery and wild stocks.*
- 2.1.11 *Develop and maintain a fisheries management plan for each individual lake and stream where stocking occurs.*

RF Objective 2.2. Prevent introgression and competition between hatchery and wild stocks of salmonids in Reservation lakes and streams.

RF Objective 2.2 Tasks:

- 2.2.1 *Sterile triploid rainbow trout stocks stocked in Reservation lakes and streams to prevent hybridization.*
- 2.2.2 *Stocking of non-native salmonids in priority waters designated by tribal members in terminal/semi-terminal lakes to prevent competition with native stocks.*

RFG 3. Utilize net pen facilities in Rufus Woods as a cost effective alternative to fish to a larger size for stocking in Reservation waters.

RF Objective 3.1. Supplement fishery to provide harvest and recreational opportunities for tribal and non-tribal members.

RF Objective 3.1 Tasks:

- 3.1.1 *Utilize sterile triploid rainbow trout.*

RF Objective 3.2. Increase efficiency to which the tribe rears trout thereby reducing overall costs.

Resident Fish Harvest Goals

RFG 4. Conserve, enhance and restore native fish populations in the blocked area above Grand Coulee Dam in Lake Roosevelt and its tributaries, and where appropriate provide opportunities for subsistence harvest by the Colville Tribal members and recreational anglers.

RF Objective 4.1. Establish a run of naturally produced kokanee salmon in select tributaries on the Colville Tribe Reservation that supports tribal and recreational fisheries.

RF Objective 4.1 Tasks:

- 4.1.1 *Plant marked kokanee eggs annually in the Sanpoil River and Barnaby Creek.*
- 4.1.2 *Plant kokanee yearlings in Sanpoil River to promote a put-and-take fishery for tribal members.*
- 4.1.3 *Monitor kokanee eggs survival, fry emigration rates, and adult returns in the Sanpoil River and Barnaby Creek.*
- 4.1.4 *Implement non-native predator reduction program in the Sanpoil River Arm to increase salmonid survival.*

RF Objective 4.2. Enhance the wild kokanee population found within Lake Roosevelt.

RF Objective 4.2 Tasks:

- 4.2.1 *Manage kokanee harvest to maximize hatchery take while minimizing wild kokanee impacts.*
- 4.2.2 *Conduct survey's in the Sanpoil arm and main stem Lake Roosevelt to determine if wild kokanee are utilizing deep-water areas and successfully reproducing.*

RF Objective 4.3. Monitor trends in abundance of fluvial and adfluvial redband rainbow trout in the Sanpoil River.

RF Objective 4.3 Tasks:

- 4.3.1 *Implement a stock assessment project with four primary tasks which include monitoring abundance, monitoring recruitment, monitoring harvest, and monitoring escapement. The development of a multi-year data set will enable managers to monitor trends over time and address potential limiting factors.*

RF Objective 4.4. Ensure historical and current fisheries data collected by CCT biologists is secured in an electronic database for future preservation and use.

RF Objective 4.4 Tasks:

- 4.4.1 *Provide support for the continued development of the Resident Fish Database.*
- 4.4.2 *Continue collaboration with local partners to ensure data sharing and persistence.*

Resident Fish Habitat Goals

RFG 5. Restore healthy and harvestable salmonid populations through rehabilitation of stream habitat and restoration of ecological function in the riparian corridors of streams upstream of Grand Coulee Dam within the boundaries of the Colville Confederated Tribes reservation.

RF Objective 5.1. Restore healthy and harvestable salmonid populations through rehabilitation of stream habitat and restoration of ecological functions.

RF Objective 5.1 Tasks:

- 5.1.1 *Determine baseline habitat conditions and identify human degradations and ecological concerns.*
- 5.1.2 *Monitor water quality parameters including dissolved oxygen, pH, alkalinity, conductivity, turbidity, and temperature.*
- 5.1.3 *Quantify stream discharge.*
- 5.1.4 *Quantify invertebrate drift.*
- 5.1.5 *Inventory fish presence, relative density, and species composition.*
- 5.1.6 *Develop a habitat protection and restoration strategy.*
- 5.1.7 *Restore riparian vegetation and stream bank conditions.*

- 5.1.8 *Evaluate road crossing and barrier data and apply prioritization criteria for further assessment or replacement.*
- 5.1.9 *Restore channel migration potential and floodplain and side channel reconnection.*
- 5.1.10 *Increase in-stream flow and prevent entrainment or impingement of fish in irrigation structures.*

RFG 6. Enhance existing recovery efforts for white sturgeon by addressing factors limiting recruitment and provide stop gap measures to support the continued persistence of white sturgeon.

RF Objective 6.1. Monitor the status and trend of the Transboundary Reach white sturgeon population.

RF Objective 6.1 Tasks:

- 6.1.1 *Perform periodic stock assessment surveys to estimate abundance, survival, growth, condition, distribution, and reproductive potential.*
- 6.1.2 *Develop a database and maintenance program that's compatible with other databases.*

RF Objective 6.2. Identify factors limiting natural recruitment of white sturgeon in the Transboundary Reach.

RF Objective 6.2 Tasks:

- 6.2.1 *Perform and assist in annual subyearling indexing to estimate recruitment.*
- 6.2.2 *Evaluate larval transport/habitat mis-match hypothesis.*
- 6.2.3 *Determine behavioral impacts of larval sturgeon exposed to heavy metals.*
- 6.2.4 *Assess rates of contaminant bioaccumulation.*

RF Objective 6.3. Perform and assist Mid-Columbia PUD's in sturgeon recovery efforts.

RF Objective 6.3 Tasks:

- 6.3.1 *Assist in broodstock/larval collection and conservation aquaculture program.*

- 6.3.2 *Assist with juvenile marking and transport and assess post release distribution of hatchery juveniles.*
- 6.3.3 *Develop and perform juvenile and adult indexing programs to obtain growth, diet, survival, and movements information.*
- 6.3.4 *Determine physical parameters of habitats used by juvenile white sturgeon.*
- 6.3.5 *Evaluate existing spawning sites/areas.*
- 6.3.6 *Assess natural reproduction and suggest adjustments to stocking rates.*
- 6.3.7 *Prepare and maintain database system to track lineage of recaptured fish.*

RF 7. Manage for a healthy and harvestable population of burbot in Lake Roosevelt.

RF Objective 7.1. Monitor status and trend of the Lake Roosevelt burbot population.

RF Objective 7.1 Tasks:

- 7.1.1 *Analysis of Fall Walleye Index Netting (FWIN) of burbot by catch data.*
- 7.1.2 *Comparison of stock status metrics generated from catch in FWIN gill nets, cod traps and trammel nets.*
- 7.1.3 *Implement burbot stock assessment program.*

ANADROMOUS FISH PROGRAM

The anadromous fish program of the Department plays an important role in providing ceremonial and subsistence fisheries for the Tribal Membership. Historically anadromous fish (salmon and steelhead) were the principal subsistence fishery and are still revered within the Tribes current cultural and traditional beliefs. The goals of the anadromous fish program is to restore natural spawning populations of salmon and steelhead to historic habitats (Reservation, Ceded Lands, U and A) and to ensure mitigation of anadromous fish runs lost, or diminished due to the construction and operation of Columbia River System dams.

ANADROMOUS FISH PROGRAM GOALS, OBJECTIVES, TASKS

SO #1. Ensure the sound management of fish (anadromous, resident and desired non-native), wildlife (native and desired non-native), and habitat resources (restoration, enhancement, and protection) within the external boundaries of the Colville Reservation and on the North Half and within the Tribes’ U&A areas, where applicable.

Anadromous Division Goals

AFG 1. Maintain and protect viable populations of Anadromous fish and their supporting habitats.

AF Objective 1.1. Anadromous Fish - Prepare by January 31st of each year an annual Fisheries Operation Plan including expected revenues and harvestable numbers of fish.

AF Objective 1.1 Tasks:

- 1.1.1 Management of fishing activities and use of fish both on and off Reservation will be in accordance with the requirements of Colville Tribal Code Chapter 4-1 (Fish, Wildlife and Recreation).*
- 1.1.2 Host an Annual Review Program to go over the accomplishments of the strategic plan and establish current year goals and objectives.*
- 1.1.3 Conduct quarterly meetings with project leads to review current year goals and objectives*

Anadromous Hatchery Goals

AFG 2. Use hatchery production to increase and restore run size and spawning escapements for all anadromous salmonids species and stocks for viable self-sustaining naturalized populations that effectively mitigate for hydro-system impacts.

AF Objective 2.1. Provide for the reintroduction of Methow Composite spring Chinook into the Okanogan River which would greatly expand the spatial structure and diversity of the Methow population of the endangered ESU. In combination with necessary habitat improvement projects, this reintroduction program could potentially increase natural production of listed spring Chinook by up to 800 adult fish in the U.S. portion of the Okanogan sub basin.

AF Objective 2.1 Tasks:

- 2.1.1 Use artificial production consistent with hatchery reform goals, performance standards and metrics developed by the Hatchery Scientific Review Group to aid in the conservation of natural-origin anadromous fish populations by increasing their abundance, distribution and diversity to enhance tribal cultural and subsistence and recreational angling opportunities.*
- 2.1.2 Develop locally adapted stocks by use of best surrogate in hatchery supplementation programs.*
- 2.1.3 Eliminate exogenous stocks from the artificial production programs once natural brood stock or a surrogate brood stock source is identified and put into use.*

- 2.1.4 *Using mark selective fishing methods, manage consumptive fisheries consistent with adult escapement objectives.*
- 2.1.5 *Reduce predatory consumption of smolts during seaward migration.*
- 2.1.6 *Utilize the new CJH to improve hatchery supplementation effectiveness (abundance, productivity, diversity and distribution) of the natural supplemented population.*
- 2.1.7 *Reduce morality and descaling at hydro projects along the system.*

AF Objective 2.2. Increase the natural spawning escapement of summer/fall Chinook to 3,500 early-arriving and 1,200 later-arriving fish; and increase total runs by 6,000-29,000 past Wells Dam as identified in the Hatchery Genetic Management Plan (July 2008, Appendix C, CJH Program Master Plan), to fully seed the Okanogan River system (including portions of the Upper Middle Main stem sub-basin).

AF Objective 2.2 Tasks:

- 2.2.1 *Implement the current rearing strategy identified in the CJH HGMP to ensure demographic success of the natural production. Monitor and adaptively manage.*
- 2.2.2 *Expand the number of acclimation facilities to better distribute releases of artificial production.*
- 2.2.3 *Reduce predatory consumption of summer Chinook sub-yearlings and yearling migrants.*
- 2.2.4 *Using mark selective fishing methods, manage consumptive fisheries consistent with adult escapement objectives*

AF Objective 2.3. Restore a viable population of naturally- reproducing summer steelhead in the Okanogan River Sub basin and consistent with recovery objectives, provide the opportunity for tribal fishers using traditional live capture gears and sport fishers to harvest summer steelhead.

AF Objective 2.3 Tasks:

- 2.3.1 *Complete the planning, design and construction of the Okanogan Basin Summer Steelhead Hatchery.*
- 2.3.2 *Implement the Okanogan Basin Summer Steelhead Integrated Recovery Program as identified in the program's HGMP (May, 2010).*

- 2.3.3 *Use kelt reconditioning to support recovery and sub-basin plan goals for abundance and diversity.*
- 2.3.4 *Use mark selective fishing to manage consumptive fisheries consistent with adult escapement objectives*
- 2.3.5 *Reduce predatory consumption of smolts during seaward migration.*
- 2.3.6 *Provide for the construction of additional hatchery facilities (acclimation ponds and weirs for broodstock and adult management) necessary to improve the hatchery program's ability to supplement the natural production.*
- 2.3.7 *Monitor and evaluate adult returns, redds, par abundance, and smolt production using standard techniques.*

AF Objective 2.4. Achieve a natural cohort replacement rate of 1 or greater and a minimum escapement of 60,000 naturally produced sockeye spawners within the Okanogan sub-basin.

AF Objective 2.4 Tasks:

- 2.4.1 *Continue to participate as a member of the Bilateral Okanogan Basin Technical Work Group in order to coordinate Okanogan sockeye management issues with Canadian fisheries managers.*
- 2.4.2 *Support the collection of eggs from locally adapted Okanogan stocks, and the incubation and marking of fry for release into Skaha Lake, to achieve a maximum production goal of approximately 2 million fry.*
- 2.4.3 *Monitor and evaluate results of sockeye introduction into Skaha Lake using methods consistent with the Okanogan Baseline Program, Hatchery monitoring and evaluation (M and E) programs, Habitat Conservation Plans (HCP), and the M and E guidance section of the Okanogan sub-basin plan.*
- 2.4.4 *Investigate options for improving sockeye passage at McIntyre Dam.*
- 2.4.5 *Determine competitive relationships between sockeye fry, kokanee fry and opossum shrimp (*Mysis relicta*). Use meristic and genetic data to separate Okanogan sockeye and Skaha kokanee*
- 2.4.6 *Determine benefits, costs and risks of sockeye re-introduction into Okanagan Lake.*
- 2.4.7 *Expand access to off-channel and in-channel thermal refugia.*

AF Objective 2.5. Manage the new CJH to support conservation and harvest of upper Columbia River summer/fall Chinook and spring Chinook in the Okanogan and Columbia Rivers.

AF Objective 2.5 Tasks:

- 2.5.1 Collect local broodstock.*
- 2.5.2 Manage natural spawning escapement.*
- 2.5.3 Minimize hatchery fish on the spawning grounds.*
- 2.5.4 Maintain and reacquire distinct population attributes of the Okanogan Sub basin.*
- 2.5.5 Reduce predatory consumption and improve passage conditions of migrating smolts in the main stem hydropower system.*
- 2.5.6 Manage and monitor consumptive fisheries consistent with adult escapement objectives by promoting mark selective fisheries.*
- 2.5.7 Perform annual spawning ground surveys.*
- 2.5.8 Implement shared monitoring and evaluation goals and objectives consistent with the Okanogan Baseline Program, CJH M&E programs (including the Annual Project Review) and Habitat Conservation Plans.*
- 2.5.9 Develop new and modify existing acclimation facilities to improve distribution of spawners.*
- 2.5.10 Enlarge existing hatchery facilities and construct additional facilities to increase effectiveness, not through quantity but through quality of the hatchery programs to supplement the natural production.*

AF Objective 2.6. Maintain the genetic diversity, productivity, population integrity and spatial structure of the locally adapted stocks (natural and artificially propagated stocks), consistent with viable salmonid policy criteria developed for recovery planning (ICTRT, July 2005) and operate the hatchery consistent with HSRG principles and standards.

AF Objective 2.6 Tasks:

- 2.6.1 Improve existing or create adult collection facilities on the tributary streams to manage the proportion of hatchery origin spawners and promote local stock production.*
- 2.6.2 Collect DNA or genetic tissue to monitor and evaluate artificial production programs.*

- 2.6.3 *Quantify naturally produced and hatchery spawners on the spawning grounds to determine success.*
- 2.6.4 *Implement shared monitoring and evaluation goals and objectives consistent with the Okanogan Baseline Program, Hatchery M&E programs and Habitat Conservation Plans.*
- 2.6.5 *Develop new and modify existing acclimation facilities to improve distribution of spawners at return and reduce point source impact of direct plants.*

AF Objective 2.7. Minimize impacts of artificial propagation on resident and naturally produced anadromous fish through genetic and fish health monitoring, juvenile rearing and release strategies, and brood collection.

AF Objective 2.7 Tasks:

- 2.7.1 *Improve existing or create adult collection facilities on the tributary streams to promote local stock production.*
- 2.7.2 *Collect genetic tissue for DNA analysis to monitor and evaluate artificial production programs.*
- 2.7.3 *Monitor smolt migration development using external visual observation within the hatchery and coincide release to peak smolt transformation.*
- 2.7.4 *Implement shared monitoring and evaluation goals and objectives consistent with the Okanogan Baseline Program, Hatchery M&E programs and HCPs.*
- 2.7.5 *Develop new and modify existing acclimation facilities to improve distribution of spawners at return and reduce point source impact of direct plants.*

AF Objective 2.8. Plan and implement a new Steelhead hatchery support conservation and harvest of upper Columbia River steelhead in the Okanogan and Columbia Rivers.

AF Objective 2.8 Tasks:

- 2.8.1 *Collect local broodstock.*
- 2.8.2 *Manage natural spawning escapement.*
- 2.8.3 *Minimize hatchery fish on the spawning grounds.*
- 2.8.4 *Maintain and reacquire distinct population attributes of the Okanogan Sub basin.*

- 2.8.5 *Reduce predatory consumption and improve passage conditions of migrating smolts in the main stem hydropower system.*
- 2.8.6 *Manage and monitor consumptive fisheries consistent with adult escapement objectives by promoting mark selective fisheries.*
- 2.8.7 *Perform annual spawning ground surveys.*
- 2.8.8 *Implement shared monitoring and evaluation goals and objectives.*
- 2.8.9 *Develop new and modify existing acclimation facilities to improve distribution of spawners.*
- 2.8.10 *Enlarge existing hatchery facilities and construct additional facilities to increase effectiveness, not through quantity but through quality of the hatchery programs to supplement the natural production.*

Anadromous Habitat Goals

AFG 3. Increase fish habitat diversity associated with the freshwater life stages of anadromous salmonids within the Okanogan sub-basin.

AF Objective 3.1. Achieve properly functioning riparian conditions (at least 75% of normative for riparian vegetation, large woody debris, and connectivity to the floodplain, and off channel habitat).

AF Objective 3.1 Tasks:

- 3.1.1 *Improve riparian habitats with the potential to contribute to future large woody debris (LWD) recruitment.*
- 3.1.2 *Create side-channel habitats, islands, spawning channels, and reconnect back channels to increase LWD deposition, channel complexity and riparian areas and improve access to thermal refugia.*
- 3.1.3 *Advocate implementation of best management practices for general land use and development (e.g., timber and range lands).*
- 3.1.4 *Restrict or condition new development to be consistent with shoreline management guidelines, local Critical Area Ordinances and development regulations, hydraulic project approval and other Tribal and/or local regulations or permits.*
- 3.1.5 *Replace invasive or non-invasive vegetation with native vegetation.*
- 3.1.6 *Replant degraded riparian zones by reestablishing native vegetation.*

- 3.1.7 *Install and maintain fencing or fish friendly stream crossing structures to prevent livestock access to riparian zones and streams.*
- 3.1.8 *Acquire priority riparian areas through purchase; conservation easements; and transfer of timber, farm, grazing or land development rights.*

AF Objective 3.2. For large woody debris, reach or exceed 20 pieces/mi (12” diameter and 35’ long) with adequate recruitment potential. This represents properly functioning condition for large woody debris in Eastern Washington (Bjorn and Reiser 1991).

AF Objective 3.2 Tasks:

- 3.2.1 *Establish and protect riparian buffers using regulatory and incentive mechanisms provided in critical area ordinances, shoreline master programs, forest practices regulations, farm conservation plans and other programs to avoid or minimize removal of native vegetation.*
- 3.2.2 *Advocate regulation or restriction of shoreline uses, forest practices, land conversion, rural and urban development and other activities within riparian zones.*
- 3.2.3 *Acquire priority riparian areas through purchase; conservation easements; and transfer of timber, farm, grazing or land development rights.*
- 3.2.4 *Add large woody debris and place in-channel engineered logjams or in-stream structures as needed to meet LWD requirements.*
- 3.2.5 *Restore and reconnect wetlands and floodplains to the riverine system.*

AF Objective 3.3. Protect and enhance rearing and pre-spawn holding habitat by 5% for anadromous salmonids using in-stream structures.

AF Objective 3.3 Tasks:

- 3.3.1 *Install habitat boulders and artificial logjams that provide large interstitial spaces providing juvenile hiding cover and current breaks for pre-spawn migrant holding areas.*
- 3.3.2 *Improve riparian habitats with the potential to contribute to future LWD recruitment.*

- 3.3.3 *Create side-channel habitats, islands, spawning channels, and reconnect back channels to increase LWD deposition, channel complexity and riparian areas.*

AF Objective 3.4. Improve stream width to depth ratios, and increase residual pool depth through reduction in fine sediment and increased bank stability.

AF Objective 3.4 Tasks:

- 3.4.1 *Reduce embeddedness 10% in selected tributaries within the Okanogan sub-basin (Moore et al. 2004) to evaluate sub-basin wide fine sediment reduction strategies.*
- 3.4.2 *Monitor embeddedness at Environmental Monitoring and Assessment Program (EMAP) [US EPA] sites and evaluate trends.*
- 3.4.3 *Install habitat boulders and artificial logjams that provide large interstitial spaces providing juvenile hiding cover and current breaks for pre-spawn migrant holding areas.*
- 3.4.4 *Improve riparian habitats with the potential to contribute to future LWD recruitment.*
- 3.4.5 *Install Newberry riffles or rock vortex structures to increase water velocities and gravel recruitment in select areas or reduces accelerated lateral channel migration or sediment input.*
- 3.4.6 *Support a road maintenance schedule that reduces and mitigates sediment impacts.*
- 3.4.7 *Advocate for or secure funding for removal, reconstruction or upgrading of roads that are vulnerable to failure due to design or location.*
- 3.4.8 *Assist with the development of road maintenance or decommissioning efforts.*
- 3.4.9 *Decrease sediment delivery from upland practices through expanded use of conservation tillage, sediment basins, Conservation Reserve Program participation, mowing of road shoulders in place of herbicide use, vegetative buffers on road shoulders, and other practices.*
- 3.4.10 *Cooperate to conduct road survey and sediment source survey throughout the watershed to determine priority action areas and establish a GIS layer for future land use activity planning.*
- 3.4.11 *Establish baseline for residual pool depths and monitor incrementally for trends.*

- 3.4.12 *Support restricting development, road construction, logging and intensive farming in areas with a high likelihood of occurrence of mass wasting (unstable slopes) and/or erosion.*
- 3.4.13 *Support minimizing total road density to less than 2 miles per square mile within the watershed and provide adequate drainage control for new roads.*
- 3.4.14 *Support protection of geologically hazardous areas, such as unstable slopes, and riparian zones through critical areas ordinances and zoning regulations.*
- 3.4.15 *Support preventing road construction and soil disturbance in proximity to riparian areas, wetlands, unstable slopes, and areas where sediment related degradation has been identified.*
- 3.4.16 *Maintain drainage ditches, culverts and other drainage structures to prevent clogging with debris and sediment.*
- 3.4.17 *Re-slope vertical banks and reestablish native riparian plant communities.*
- 3.4.18 *Stabilize sloughing banks using soft techniques, wherever possible, and armoring when necessary.*
- 3.4.19 *Use barb and bail techniques to manage sediment loads and move channel away from sensitive banks and reestablish plant communities.*
- 3.4.20 *Cooperate to limit grazing access to the riparian corridor and minimize the time that these areas can be used.*
- 3.4.21 *Increase the amount of flood prone area to reduce lateral scour and dissipate energy in the mainstream or river channel.*

AF Objective 3.5. Increase floodplain connectivity within an additional 10% of the Okanogan sub-basin to establish aquatic/terrestrial nutrient exchange processes allowing for floodplain inundation to occur every two years on average.

AF Objective 3.5 Tasks:

- 3.5.1 *Remove dikes, reestablish back channels, re-slope vertical banks, and establish wetland habitats that allow floodplain inundation to occur approximately every 2 years.*
- 3.5.2 *Determine pre-settlement riparian corridor.*

- 3.5.3 *Restore and conserve historic riparian corridor.*
- 3.5.4 *Protect and re-establish all ground-water sources.*
- 3.5.5 *Advocate for and participate in cooperative efforts to address non-point and point source pollution.*

AFG 4. Improve anadromous salmonids survival and habitat quantity through the restoration of fish passage conditions at human made barriers.

AF Objective 4.1. Ensure that useable or restorable habitat is accessible to anadromous salmonids. Ensure no impact to upstream or downstream movement (100% passage). Obstructions, such as brood stock collection weirs, that meet NOAA Fisheries standards and aid in fish management are permissible.

AF Objective 4.1 Tasks:

- 4.1.1 *Prevent creation of barriers by supporting restrictions on the placement of new roads or providing adequate mitigation for unavoidable impacts.*
- 4.1.2 *Ensure that the design and construction of road culverts is consistent with established standards and guidelines.*
- 4.1.3 *Prevent the placement of dikes and other structures that may confine or restrict side channels and disconnect habitat in floodplains.*
- 4.1.4 *Use permits or other local, Tribal and federal approval mechanisms to impose design construction and installation restrictions on activities that may impede fish passage and access.*
- 4.1.5 *Support and/or remove modify or replace culverts and/ or screens that prevent or restrict access to salmon habitat and/or cause loss of habitat connectivity.*
- 4.1.6 *Remove, replace or modify diversion dams identified as major limiting factors affecting fish passage and habitat connectivity.*
- 4.1.7 *Use cost sharing programs to help landowners screen diversions which meet Federal regulatory standards (approach velocities 1 fps and openings 3/32" or smaller).*
- 4.1.8 *Work with First Nations, WDFW and the IJC to insure sufficient flows in Okanogan to prevent dewatering of redds.*

Anadromous Harvest Goals

AFG 5. Facilitate the Tribal Members pursuit of their rightful ceremonial and subsistence fisheries in the Okanogan River (including B.C. portion), Methow River, Wenatchee River (including Icicle Creek), Chelan River, Entiat River, main stem Columbia, e.g., Wells Pool/Tailrace, Chief Joseph tailrace, and U&A areas.

AF Objective 5.1. Provide tribal and selective recreational harvest opportunities for summer/fall Chinook, summer steelhead, sockeye salmon, and spring Chinook where feasible.

AF Objective 5.1 Tasks:

- 5.1.1 *Operate summer/fall Chinook acclimation ponds at strategic locations on the Okanogan River and release artificial production from these sites annually.*
- 5.1.2 *Increase or maintain artificial production capacity at levels necessary to meet management needs, maintain new and existing acclimation sites, and support existing and new direct hatchery releases.*
- 5.1.3 *Monitor adult salmonid returns annually, determine a baseline, and evaluate trends.*
- 5.1.4 *Develop live-capture gear (construct scaffolds for dip net hoop net fishing, tangle net, weir, floating fish trap, beach seine and purse seine) and methodologies for mark selective tribal fisheries that can potentially protect natural-origin fish while consumptively harvesting hatchery-origin fish.*
- 5.1.5 *Expand the ability to process and store surplus adult salmon that are anticipated with the completion and successful operation of the new Chief Joseph Salmon Hatchery.*
- 5.1.6 *Increase tribal member harvest input through the development of a tribal member advisory group that will provide their input on anadromous fish harvest issues.*

AF Objective 5.2. Increase the abundance of summer/fall Chinook escapement in the Okanogan River by 50% over the next ten year period.

AF Objective 5.2 Tasks:

- 5.2.1 *Operate summer/fall Chinook acclimation ponds at strategic locations and release artificial production from these sites annually.*
- 5.2.2 *Develop in-stream structures to sort gravel and reduce fine sediment accumulation.*

- 5.2.3 *Create side-channel habitats, islands, spawning channels, and reconnect back channels to increase channel complexity.*

AFG 6. Restore anadromous species and stocks in the Upper Columbia Blocked Area under Colville Tribal jurisdiction that are currently extirpated.

AF Objective 6.1. Investigate anadromous fish passage (adult and juvenile) at Chief Joseph Dam.

AF Objective 6.1 Tasks:

- 6.1.1 *Investigate the feasibility of providing anadromous fish passage (adult and juvenile) at Chief Joseph Dam.*
- 6.1.2 *Survey and estimate anadromous salmonid production from the main stem and connected tributaries of the Columbia River between Chief Joseph Dam and Grand Coulee Dam. (Jerry to send report).*
- 6.1.3 *Once runs of summer/fall Chinook are achieved at CJH, collect and pass 100-300 surplus adult tagged fish above the Dam to test the suitability of historical habitat in Rufus Woods Lake and passage around Chief Joseph Dam.*
- 6.1.4 *Develop water management plans (releases) which are conducive to juvenile survival during rearing and outmigration.*

AF Objective 6.2. Provide Anadromous fish passage (adult and juvenile) over Grand Coulee Dam.

AF Objective 6.2 Tasks:

- 6.2.1 *Investigate the feasibility of providing anadromous fish passage (adult and juvenile) over Grand Coulee Dam.*
- 6.2.2 *Survey and estimate anadromous salmonid production from the main stem and connected tributaries of the Columbia River upriver of Grand Coulee Dam.*
- 6.2.3 *Collect and pass 100 to 300 surplus adult tagged fish above Grand Coulee Dam to test the location and suitability of historical habitat in Lake Roosevelt.*
- 6.2.4 *Develop preferred alternatives based upon findings from strategies 1-3.*
- 6.2.5 *Develop water management plans (releases) which are conducive to juvenile survival during rearing and outmigration.*

- 6.2.6 *Develop habitat and passage plans to improve anadromous fish productivity.*

AF Objective 6.3. Use hatcheries to produce anadromous fish resources at historical levels and as a priority use native fish to restore stocks and seed habitat in historical areas.

AF Objective 6.3 Tasks:

- 6.3.1 *Use hatcheries, with an emphasis on native stocks, employing the most innovative fish culture techniques, to produce fish with similar behavior and instincts of wild fish resulting in greater survival.*
- 6.3.2 *Utilize native anadromous fish, which have exhibited local adaptations to the region, as stock to reestablish native fish populations to historic areas.*
- 6.3.3 *Utilize artificial hatchery production to provide subsistence fishing opportunities where native habitats are no longer suitable.*

WILDLIFE MANAGEMENT PROGRAM GOALS, OBJECTIVES, TASKS

SO #1. Ensure the sound management of fish (anadromous, resident and desired non-native), wildlife (native and desired non-native), and habitat resources (restoration, enhancement, and protection) within the external boundaries of the Colville Reservation and on the North Half and within the Tribes' U&A areas, where applicable.

WLG 1. Maintain healthy, self-sustaining game and non-game populations for subsistence, cultural and recreational use by the tribal membership on the Reservation, North Half and Aboriginal Territories.

WL Objective 1.1: Hunting and Trapping. Manage healthy game and non-game wildlife populations for hunting and trapping by tribal members for subsistence, cultural and recreational use.

WL Objective 1.1 Tasks:

- 1.1.1. Management of wildlife for hunting and trapping will be in accordance with the requirements of Colville Tribal Code Chapter 4-1 (Fish, Wildlife and Recreation).
- 1.1.2. Monitor and determine population status of game species using the best available science on an annual basis to help determine population objectives and management strategies.
- 1.1.3. Create population objectives and management strategies for harvest of game species and determine if population objectives are being met under current structure (every third year).
- 1.1.4. Prepare Wildlife Program Annual Reports including population status, trend and harvest management.

- 1.1.5. Determine the number of tags and permits available for hunting and trapping for game and non-game species using current population status, trend and harvest data.
- 1.1.6. Conduct quarterly meetings with project leads and host an Annual Program Review to review and establish upcoming years' goals and objectives, and go over the accomplishments of the strategic plan.
- 1.1.7. Initiate steps towards mandatory, annual big game harvest reporting.
- 1.1.8. Investigate the cost and resources necessary and implement an electronic tag issuing and harvest reporting service/database.

WL Objective 1.2: Game Species. Achieve a self-sustaining, healthy population of big game species, small game species, waterfowl, upland game birds, and furbearers.

WL Objective 1.2. Tasks:

- 1.2.1 Set annual and seasonal herd composition targets for **ungulate** populations (i.e. fawn:adult and doe/cow:buck/bull ratios).
- 1.2.2 Use established protocols and the best available science to conduct annual aerial surveys to monitor numbers and composition of winter ungulate populations.
- 1.2.3 Use established protocols and the best available science to conduct early fall ungulate composition counts on the North Half (i.e. buck:doe and doe:fawn ratios).
- 1.2.4 Utilize existing wildlife population models to evaluate population status and trends for game species.
- 1.2.5 Develop GIS models to identify critical big game habitat needs on the Reservation and North Half utilizing existing research and wildlife population models. Procure funding for these analyses.
- 1.2.6 Develop road density and zone of influence model for **elk** and use this analysis to develop a long-term strategy for road management on the Reservation and North Half.
- 1.2.7 Determine if land-use, resource extraction or other management activities are having an adverse impact on ungulate game species. If adverse impact is determined, devise adaptive management strategies for eliminating or reducing this adverse impact.
- 1.2.8 Expand current California **bighorn sheep** range assessment, include a Rocky Mountain bighorn sheep Habitat Suitability Assessment.
- 1.2.9 Model and modify the Bighorn Sheep Management Plan (combined for California and Rocky Mountain animals).
- 1.2.10 Continue on-going bighorn sheep recovery and management activities within the external boundary of the Colville Reservation and North Half.
- 1.2.11 Expand **pronghorn antelope** habitat assessment and prepare management plan.
- 1.2.12 Reintroduce and recover pronghorn antelope populations in the historical habitat range within the bounds of the Colville Reservation and the North Half.
- 1.2.13 Expand the **mountain goat** Habitat Suitability Assessment and prepare management plan.
- 1.2.14 Reintroduce and recover mountain goat populations in their historical habitat range within the bounds of the Colville Reservation and the North Half.

- 1.2.15 Monitor **upland game bird** populations by conducting annual surveys. Develop yearly report.
- 1.2.16 Review best practices/literature review and report for best practices and habitat restoration techniques for upland game birds.
- 1.2.17 Maintain self-sustaining, healthy populations of game birds on the Reservation and comply with population goals when setting regulations.
- 1.2.18 Determine if land-use, resource extraction or other management activities are having an adverse impact on game bird species. If adverse impact is determined, devise adaptive management strategies for eliminating or reducing this adverse impact.
- 1.2.19 Monitor **furbearer** (pine marten, weasel, otter, beaver, bobcat, cougar, muskrat, raccoon, skunk, badger, etc.) populations by conducting annual surveys and harvest reports. Develop yearly report.
- 1.2.20 Acquire Hide/Pelt seals for river otter and bobcat through the USFWS and develop annual protocols for administering seals and recording harvest data in compliance with the Cites Act.
- 1.2.21 Develop robust field survey data forms and store all wildlife sightings and yearly survey data in GIS and database formats.

WL Objective 1.3: Non-Game Species. Achieve a suite of self-sustaining, healthy populations of native and desired non-game species including T&E and Culturally Significant wildlife species based on various habitats throughout the Reservation, North Half and Aboriginal Territories.

WL Objective 1.3. Tasks:

- 1.3.1. Prioritize and implement population assessments, management strategies, and monitoring plans for T&E and Tribal Priority species in partnership with local tribal and non-tribal organizations, and Federal and State agencies.
- 1.3.2. Species listed as threatened or endangered by the State of Washington will be managed per State recommendations except where tribal or federal agencies have developed more stringent recommendations.
- 1.3.3. Monitor and evaluate all reported threatened and endangered species sightings for appropriate action to address the individual needs of each species.
- 1.3.4. Contribute to the recovery and management of T&E and priority species (Federal, State and Tribal) by conducting feasibility studies and re-establishing wildlife populations throughout their historic native range on the Reservation, North Half and Aboriginal Territories where habitat exists or can be feasibly restored.
- 1.3.5. Restore, improve, manage, and protect the quantity and quality of critical habitat for T&E and priority species. Protect and enhance riparian corridors, shrubby draws, old-mature forests, ponderosa pine forests, grasslands, shrub-steppe, and biodiversity hotspots (such as ridgelines and valley bottoms) for wildlife species and their habitats.
- 1.3.6. Manage recovery efforts for species with large area requirements (such as forest carnivores) cooperatively with agencies responsible for resource management within the North Half and Aboriginal Territories.

- 1.3.7. Complete and implement population assessments and management plans for sensitive wildlife species that could become listed in the future that occur on the Colville Reservation.
- 1.3.8. Determine if land-use, resource extraction or other management activities are having an adverse impact on T&E, priority, and any species of concern, and devise adaptive management strategies for eliminating or reducing any adverse impacts.
- 1.3.9. Incorporate current scientific research in wildlife and their habitat when assessing resource management proposals and in developing recommended mitigation measures.

WL Objective 1.4: Disease. Minimize mortality of wild animals on the Reservation, North Half and Aboriginal Territories due to disease and contaminants.

WL Objective 1.4. Tasks:

- 1.4.1. Participate in organized Federal and State wildlife disease surveillance monitoring for: avian influenza, chronic wasting disease, epizootic hemorrhagic disease, hoof rot, white-nose syndrome (bats), fungal outbreaks in frogs and toads, and others diseases as established.
- 1.4.2. Conduct surveillance monitoring to identify sources of mortality associated with potential disease or contamination (e.g., lead shot mortality in swans, loons, and eagles and chronic wasting in deer).
- 1.4.3. Follow state and federal procedures for reporting wildlife disease occurrences or contaminant-caused mortality.
- 1.4.4. Add update any protocol for bighorn sheep disease identification and removal and include in the Bighorn sheep management plan.
- 1.4.5. Create a Tribal Code requiring all residents occurring within the external boundaries of the Colville Reservation be required to register all domestic sheep and goats annually.
- 1.4.6. Create Tribal Code prohibiting domestic sheep or goats within a designated buffer distance surrounding existing bighorn sheep populations or known travel corridors.
- 1.4.7. Implement a public outreach and education strategy on the dangers of domestic sheep and goats to native bighorn sheep populations.
- 1.4.8. Enforce Tribal Code 4-1-300 prohibiting captive farming of wild ungulates or deleterious exotic wildlife within the boundaries of the Colville Reservation without a permit.
- 1.4.9. Create an emergency preparedness plan for quarantine and lethal removal in instances such as: pneumonia, Psoroptes, tuberculosis, CWD, and hoof-and-mouth disease.
- 1.4.10. Develop a protocol for properly treating equipment such as capture bags, nets, blindfolds, and hobbles that have been in contact with sick or diseased wildlife.

WL Objective 1.5: Wildlife Management Recommendations. Maintain a diverse suite of wildlife species on the Reservation, with specific management plans and habitat

targets identified for individual species as time and funding allows. More details are available from CCT Wildlife Department reports.

WL Objective 1.5 Tasks:

- 1.5.1. Implement and update feral horse management plan as needed and continue to assess horse population, habitat impacts to native wildlife populations (elk, deer, grouse, burrowing owls, etc.), and feasible ways to reduce or manage a goal-driven stable population of feral horses on the Reservation.
- 1.5.2. Update sharp-tailed grouse management plan.
- 1.5.3. Complete bighorn sheep management plan.
- 1.5.4. Update gray wolf management plan.
- 1.5.5. Continue to develop management plans and conduct feasibility studies for priority wildlife species on the Reservation. Examples discussed in 2014 include burrowing owl, pronghorn, and big game species.
- 1.5.6. Adhere to technical management recommendations for priority wildlife whenever possible. Elaborated Management Plans, management practices, and habitat targets can be found in specific CCT Wildlife Department reports (also see 1.5.7 – 1.5.19. below).
- 1.5.7. Northern goshawk and habitat guidelines:
 - Maintain large stands of homogeneous mature to late successional conifer forests with minimal edge habitat to allow for successful nesting over multiple generations. Biologists should recommend 5-6 reserved forest patches at least 30 acres in size each for nesting and replacement stands in a 6000 acre area for goshawk nesting activities.
 - Forests with >50% tree canopy closure and dominant trees greater than 100 feet tall should be managed for a minimum density of 60 trees/acre over 12 inches DBH.
 - Retain snags, large downed wood, and old trees greater than 20 inches in diameter in core goshawk habitat.
 - Maintain suitable foraging habitat for goshawks within nesting home range, including multi-layered canopies, low shrub-densities and open understories.
 - Focus habitat protection of mature to old forests on the lower 1/3 to bottom of drainages.
 - Active road building, logging, and site preparation for silvicultural activities should not take place within 0.5 miles of active nests during the nesting season (1 March to 30 September).
 - Protect goshawk nests throughout the year from logging, road building and human disturbance by a 660 foot buffer distance from all historic and active nest sites.
 - Retain all large, old, and leaning trees and snags over 6 inches DBH and all large logs within 660 feet of historic and active goshawk nests.
 - Monitor goshawk populations and their nest sites.
- 1.5.7.1. Bald eagle and habitat guidelines:

- Retain the largest and tallest trees and snags with strong limbs near the top of the tree/snag to support the weight of the large bald eagle nests, within 1/2 mile of open water and rivers.
- Retain all trees greater than 21 inches DBH within 330 feet of any bald eagle nests (historic or active).
- Identify and protect large coniferous and deciduous trees suitable for bald eagle nesting and perching. No removal will take place of any overstory trees within 330 feet of eagle nests since they provide hunting and perching trees, visual screens to disturbance and weather barriers.
- Timber harvesting operations including road construction, chain-sawing, pre-scribed burning and yarding activities must stay further than 660 feet from any nest (either historic nests or new nest sites) and should provide a visual screen between nesting eagles and human activities during the nesting season (January – August).
- Protect known winter communal roosting sites by restricting timber harvest to greater than 660 feet from known roosting locations.
- Monitor and protect bald eagle populations and active and potential nest and roost sites.

1.5.8. Great gray owl and habitat guidelines:

- Retain large diameter trees and large snags, broken topped trees, and leaning trees greater than 20 inches diameter at breast height (DBH) for roosting and nesting habitat.
- Retain large and old western larch trees as high-quality snags sought by wildlife.
- Limit the size of clearcuts and regeneration harvests in mid-montane plant associations to be less than 12 acres within a mosaic of different aged forest stands.
- Design forest harvests with irregular edges.
- Retain at least 50% forest cover in potential or historic great gray owl habitat nesting areas.
- Maintain existing forest openings within great gray owl habitat and adjacent forests as foraging habitat for nesting and fledging owls.
- Maintain old forest conditions surrounding forest openings and meadows in potential great gray owl habitat, and retain most trees greater than 12 inches DBH and all trees greater than 20 inches DBH for juvenile and fledging habitat.
- Avoid all ground disturbing activities between January 1st and June 30th in great gray owl nesting habitat.
- Monitor and protect great gray owl populations and their nest sites.

1.5.9. Pileated woodpecker and habitat guidelines:

- Retain large diameter trees and snags greater than 20 inches DBH and greater than 50 feet in height.

- Retain large tree and snag densities at 5 trees or snags/acre of various decay classes in pileated woodpecker nesting, roosting and foraging habitat.
- Retain CWD to cover greater than 10% of the forest floor, or greater than 40 pieces/acre of uncut logs greater than 10 inches in diameter.
- Manage towards late successional forest conditions in contiguous blocks of 1,000 to 2,500 acres to maintain habitat for pileated woodpeckers as a keystone species for all secondary cavity nesters.
- Monitor pileated woodpecker populations.

1.5.10. White-headed woodpecker and habitat guidelines:

- Retain at least 12 large live and 4 large dead ponderosa pine trees per acre, each greater than 20 inches DBH.
- Increase quality of white-headed woodpecker habitat by restoring ponderosa pine forests to < 40% tree canopy cover using restorative thinning and prescribed fire to mimic historic ponderosa pine conditions.
- Where salvage logging occurs, leave residual live and dead tree densities of at least 15 to 38 trees or snags per acre greater than 10 inches DBH. All large trees and snags greater than 20 inch DBH should be left as critical foraging and roosting habitat for woodpeckers.
- Prioritize restoration of ponderosa pine stands with the objective to release medium sized trees to develop larger, older trees and resilient stands.
- Monitor white-headed woodpecker populations.

1.5.11. Black-backed woodpecker and habitat guidelines:

- Leave high densities (greater than 80 snags/acre) of tall snags (greater than 62 feet tall) of trees greater than 10 inches in diameter for woodpecker use following stand-replacing fires or beetle-kill events.
- Retain the hardest snags (decay class 1 and 2) after wildfires or other disturbance events.
- In mixed conifer forests, use harvest techniques that leave trees and snags in a clumped, patchy distribution that was the historic norm.
- Retain legacy trees greater than 20 inches in diameter during salvage-logging.
- Restrict salvage operations to occur the breeding and fledging periods between late April and early July.
- Monitor black-backed woodpecker populations.

1.5.12. Common loon and habitat guidelines:

- Survey and document all known loon nesting and brood rearing habitat on lakes throughout the Colville Reservation and the North Half.

- Implement and clearly sign seasonal 490 foot buffers to protect loon nesting and chick rearing habitats from human disturbances including recreation, camping, and watercraft use Between April 15 and September 1, with signs both in the water and on land.
- Protect known loon nesting and chick rearing habitats from logging, development and road-building within 490 foot buffers.
- Seasonally, restrict motorized watercraft within a larger region of nesting habitat to assist in nesting and chick rearing. Seasonally, restrict all boat traffic from shorelines in areas where loons are potentially nesting. A No Wake Zone will be marked with buoys from April 15th to September 1st.
- Build and place artificial nesting platforms in lakes where loons are present regularly, but reproductive success has been limited.
- Lead fishing weights/tackle should be banned on lakes where loons are known to occur, or are able to breed. Educate the public of the problems associated with lead weights (pamphlets, signs, public meetings, etc.)
- Monitor common loon populations.
- Monitor mercury levels of loons. Collect blood and feather samples during yearly banding and capture efforts and have analyzed for mercury levels. Any activities on the Reservation lakes elevating mercury levels should be avoided due to negative effects on loons.

1.5.13. American marten and habitat guidelines:

- Designate watersheds that will be managed to provide functional marten habitat.
- Maintain 70% of designated watersheds to have greater than 50% closed canopy as old growth forest or mature and trending toward old growth conditions.
- Retain at least 6 large logs/acre >16 inches wide in marten habitat.
- Retain at least 30 pieces of wood per acre on the ground, or maintain at least 25% CWD cover on the forest floor in marten habitat.
- Maintain uncut forest patches at least 40 acres in size in marten habitat on the Reservation, and forest openings within a watershed should not exceed a threshold of 25%.
- Maintain old growth forest patches within 330 feet of perennial water and streams.
- Maintain at least 10% shrub cover where it is the historic norm for the stand.
- Open road densities in marten habitat approximate 1 mile/square mile.
- Monitor American martin populations.

1.5.14. Western toad and habitat guidelines:

- Protect breeding habitat as shallow and warm lakes and ponds with a depth between 20 inches and 6 inches deep, and water temperatures at the 2 inch depth of less than 97° F.
- Protect with breeding ponds less than 500 acres in size with floating, emergent, and submerged vegetation, from cattle trampling and other human use activities during the spring breeding and tadpole development season.
- Manage forests that historically had closed canopies to have at least 50-75% canopy closure within 1000 feet of breeding ponds.
- Protect open shrubby draws, riparian areas, wet meadows and wetlands within at least 1000 feet of breeding ponds from roading and road disturbances by identifying the minimum necessary road network and closing or decommissioning unnecessary roads that were not historically used as trails on the landscape.
- Maintain a buffer of 1,000 feet of riparian, forest and protected meadow habitat adjacent to natal breeding ponds as toad movement and foraging habitat.
- Leave all CWD within a 150 foot buffer surrounding perennial streams and breeding ponds to protect western toad foraging and cover habitat.
- Roads should be located and constructed in a manner that minimizes sedimentation. Construction of new roads within sensitive areas such as riparian areas, seeps, talus, and unstable areas should be avoided except in situations where other road alternatives would be even more damaging.
- Monitor western toad populations.

1.5.15. Golden eagle and habitat guidelines:

- Restrict developments and human disturbances from occurring on or near cliffs and rocky outcrops greater than 50 feet in height at less than 3,500-foot elevation. A buffer of 200 feet from such sites should be used unless a known nest exists. Then the nest protection criteria apply.
- Retain the largest trees and snags over 20 inches in diameter within 1,500 feet of cliffs, rocky outcrops, and in shrub-steppe/open ponderosa pine forests as nesting trees.
- Protect golden eagle nests on cliff walls and nest trees (historic and active) a by a 1/4 mile (1,320 feet) buffer.
- Apply seasonal restrictions on human access near or up to rock ledges within a 1/4 mile area from active nests between the months of February 15 to July 15 to avoid detrimental disturbance to nests and young from recreation, campgrounds, roads, and other forms of human development.
- Prioritize shrub-steppe and grassland protection, native shrub restoration, non-native weed removal to maintain a healthy prey populations within a 1/4 mile buffer from breeding and nesting territories.

- Avoid conversion or degradation of shrub-steppe habitat within 2 miles of known nesting eagle sites to provide prey abundance.
- Avoid population control activities (shooting or pesticide use) on prey species such as marmots, ground squirrels, rabbits, and other small to mid-sized mammals within a 1 mile buffer zone from nest sites.
- Monitor golden eagle populations and their nest sites.

1.5.16. Forest grouse and habitat guidelines:

- Increase brood rearing and nesting habitat for all forest grouse species by ensuring open meadows and riparian draws have at least 10% shrub cover, less than 10% bare ground except where it is naturally occurring.
- Maintain some dense stands of trees with greater than 50% canopy cover adjacent to open shrub steppe and meadow habitats for grouse security habitat.
- Maintain buffers of mature forests less than 1 mile from known breeding areas for wintering grouse habitat.
- Within grouse habitat, avoid forestry practices which may be harmful to grouse habitat conditions such as high density replanting, even-aged plantations, or herbicide applications.
- Move livestock out of shrub-steppe and grasslands when utilization reaches 35% bunchgrasses in uplands. Restrict cattle from access to riparian areas.
- Monitor dusky (blue), spruce, ptarmigan, and sage grouse populations.

1.5.17. Canada lynx and habitat guidelines:

- In subalpine forests, maintain at least 10% lynx denning habitats as forested stands with high density of logs (>40 logs/150 feet), and no more than 30% non-lynx habitat (logged in the last 30 years).
- In forest harvest areas, maintain buffer strips to provide shade and lower temperatures for travel and foraging.
- Establish 300 foot buffers on ridgelines, saddles and riparian areas to protect lynx dispersal and travel corridors. Avoid building roads in these areas.
- Leave at least 25% CWD and 25% shrub cover on the ground for small mammal prey habitat.
- Restore closed-canopy, mature to old coniferous forest stands to contain at least 12 trees per acre greater than 21 inches DBH and all trees over 24 inches DBH within areas identified as priority lynx habitat areas.
- Prioritize forests with northern aspects and areas with slopes less than 40% steepness for lynx habitat.
- Setup Lynx Management Units in potential lynx areas identified by Washington state and federal agencies with special attention to the northern boundaries of the CCT Reservation.

- Emphasize and protect watersheds with historical value of potential lynx habitat and to restore habitat conditions for all species associated with the cold-moist forests group in the medium/large trees family. Restorative harvest methods and thinning young forest stands to accelerate the development of old forest structure is critical for these species.
 - Monitor lynx populations.
- 1.5.18. Great blue heron AND cavity nesting waterfowl habitat guidelines:
- Limit disturbance, including human foot access within 820 feet of great blue heron rookeries and cavity nesting trees for wood ducks.
 - Avoid harvest and falling of large trees and snags over 16 inches in diameter (especially cottonwood, aspen, and birch) along rivers, streams, ponded areas, and lakes, to protect potential nesting habitat.
 - Road setbacks should be 820 feet from riparian's edge to limit vehicular traffic and disturbance throughout the year.
 - Monitor great blue heron populations.

WLG 2. Protect, maintain, and restore desired habitats to support healthy productive forest/plant communities, and dependent wildlife populations associated with these ecosystems.

WL Objective 2.1: Habitat Quality. Protect, enhance and restore the *quality* of habitat necessary to sustain, protect, and/or restore healthy wildlife populations throughout the Reservation, North Half and Aboriginal Territories.

WL Objective 2.1 Tasks:

- 2.1.1. Improve and restore the quality older ponderosa pine forests to sustain snag-dependent and fire-adapted species, including but not limited to white-headed and other primary excavating woodpeckers, cavity nesting songbirds, forest grouse species, western gray squirrels, Rocky Mountain elk, and mule deer.
- 2.1.2. Improve and develop the quality of older moist forests to sustain old growth-, snag- and coarse woody debris-dependent species, including but not limited to northern goshawks, American marten, Canada lynx, and pileated woodpeckers.
- 2.1.3. Improve and develop the quality of riparian habitat as an optimal corridor for aquatic and upland wildlife species, and riparian sensitive and dependent species, including but not limited to western toad, moose, American marten, and many species of migratory songbirds.
- 2.1.4. Improve and develop the quality of shrub steppe and grasslands for dependent species, including but not limited to pronghorns, Rocky Mountain elk, sharp-tailed grouse, white tailed jackrabbits, and golden eagles.
- 2.2.1. Improve and develop the quality of wetland ecosystems by corroborating with other tribal and regional departments to identify key wetlands for protection and restoration.
- 2.2.2. Partner with forestry resources to decrease road density and the zone of influence of roads on elk throughout the Reservation and the North Half. Use modeling

analyses to develop a long-term strategy for road management on the reservation, and increase the quality of habitat available for wildlife.

- 2.1.5. Use special emphasis management areas (see Goal 3) to help improve and increase habitat availability for key wildlife species associated with each habitat.
- 2.1.6. Implement the use of “Wildlife Friendly Fencing” techniques under NRCS specifications on all wildlife managed lands and encourage other tribal departments to utilize these techniques.
- 2.1.7. Investigate, develop, and implement a strategy to reduce all-terrain vehicle (ATV), off-road vehicle (ORV), of seasonal vehicle use impacts to wildlife and the connectivity and effectiveness of their habitats.
- 2.1.8. Develop a strategic critical habitat document for Fire Control, in order to coordinate and help protect critical habitat during fire-fighting efforts. For example, construct dozer lines along already disturbed areas, to protect significant bitterbrush stands.

WL Objective 2.2: Habitat Quantity. Protect, enhance and restore the *quantity* of habitat necessary to sustain, protect, and/or restore healthy wildlife populations throughout the Reservation, North Half and Aboriginal Territories.

WL Objective 2.2 Tasks:

- 2.2.3. Refine Sensitivity map layers (Appendix VII) of existing and potential priority habitats.
- 2.2.4. Utilize geospatial analysis techniques to identify key critical habitat areas on the Reservation, North Half and Aboriginal Territories.
- 2.2.5. Complete all remaining acquisitions identified by the Mitigation Program, to offset BPA’s mitigation crediting ledger.
- 2.2.6. Protect and create riparian corridors, shrubby draws, old-mature forests, ponderosa pine forests, grasslands, shrub-steppe, and biodiversity hotspots (such as ridgelines and valley bottoms) for wildlife species and their habitats.
- 2.2.7. Identify and maintain wildlife corridors and adequate habitat patch sizes within and between habitat areas to ensure genetic exchange and adequate utilization of core habitats utilized by wildlife species. Partner with federal, state agencies and other tribal departments.
- 2.2.8. Use special emphasis management areas (see Goal 3) to help improve and increase habitat availability for key wildlife species associated with these habitats.

WL Objective 2.3: Wildlife Habitat Management Recommendations. Maintain a diverse cross-section of healthy wildlife habitat throughout the Reservation, with specific management plans, best available science and targets identified for each forest series and priority habitat as time and funding allows. Table 1 lists summaries of leave tree requirements. These can be referenced for more details in CCT Wildlife Department reports.

Table 1. Leave Tree Requirement Summary

Forest Series	Snags/Acre	Logs/Acre	CWD/Acre	Green Trees/Acre (in areas where minimum snag retention guidelines are not met)
Ponderosa Pine	2 snags/acre >20" DBH, >40' tall; 3 snags/acre in nesting roosting and foraging areas, all snags >25"DBH	2 logs/acre >16" DBH, 40' long	5% ground cover in foraging, roosting, nesting areas	retain 2 green trees/acre as snag replacement trees.
Douglas Fir	5 snags/acre >20" DBH, >12' tall; 3 snags/acre in nesting roosting and foraging areas, all snags >25"DBH	8 logs/acre >16" DBH, 40' long, including 2 > 24" DBH	5% ground cover in foraging, roosting, nesting areas	retain 2 green trees/acre as snag replacement trees.
Grand Fir	5 snags/acre >20" DBH, >12' tall; 3 snags/acre in nesting roosting and foraging areas, all snags >25"DBH	8 logs/acre >16" DBH, 40' long, including 2 > 24" DBH	5% ground cover in foraging, roosting, nesting areas	retain 2 green trees/acre as snag replacement trees.
Western Hemlock	5 snags/acre >20" DBH, >12' tall; 3 snags/acre in nesting roosting and foraging areas, all snags >25"DBH	8 logs/acre >16" DBH, 40' long, including 2 > 24" DBH	5% ground cover in foraging, roosting, nesting areas	retain 2 green trees/acre as snag replacement trees.
Western Redcedar	5 snags/acre >20" DBH, >12' tall; 3 snags/acre in nesting roosting and foraging areas, all snags >25"DBH	8 logs/acre >16" DBH, 40' long, including 2 > 24" DBH	5% ground cover in foraging, roosting, nesting areas	retain 2 green trees/acre as snag replacement trees.
Subalpine Forests	see lynx habitat requirements	see lynx habitat requirements		
Riparian- Dry Forests	2 >20" DBH	5 large logs/acre, > 20 in dia	5 tons CWD/acre	
Riparian- Moist Forests	2 >20" DBH	20 large logs/acre, > 20 in dia	20 tons CWD/acre	
Lakes and Ponds	2 >20" DBH			

WL Objective 2.3 Tasks:

2.3.1. All Forest Series and Priority Habitats

- 2.3.1.1. Work with other tribal agencies and departments to maintain all forests and priority habitats in stable or improving condition, and to optimize habitat characteristics important for wildlife.
- 2.3.1.2. Create healthy, resilient forests that are resilient to wildfires and other disturbances (insects, disease, wind and storms).

- 2.3.1.3. Achieve resilient forest stands on the Reservation by promoting 1) thinning programs to decrease unnaturally dense stands of young trees and brush, and ensure adequate fuel treatment of the remaining slash; 2) implementation of a periodic prescribed burning program (on a minimum of 40-60 year schedule) to return dry forests to their natural fire-adapted ecosystem characteristics, moving the understory towards historic conditions suitable for wildlife in that forest series.
- 2.3.1.4. Retain large old live trees, large snags, and large down logs (>21 inches DBH) for wildlife nesting/denning, perching, hunting and roosting. Specifics listed under each forest series below.
- 2.3.1.5. Leave coarse woody debris (CWD) for foraging wildlife.
- 2.3.1.6. Leave a clumped distribution of large diameter trees and snags using ICO (Individuals, Clumps and Openings) methods. This practical approach to marking trees for thinning is a way to maintain historical patchiness of stands that will restore spatial patterns likely to enhance resilience and climate adaption.
- 2.3.1.7. Protect legacy trees: 1) from fire-caused mortality in stands with accumulated duff and mistletoe. Employ duff removal by raking under legacy trees to protect large trees from mortality during prescribed fires and natural wildfires; 2) in post-fire salvage-logged areas. These include high-habitat-valued fire-damaged trees and large (damaged or un-damaged) commercially valuable trees that are likely to remain standing for a prolonged period of time.
- 2.3.1.8. Do not oversimplify and apply the same methods or prescriptions across the entire landscape.
- 2.3.1.9. Maintain large blocks of large-structure forest habitat when planning reforestation and restoration to allow for wildlife corridors between habitat blocks. At least 40% of the forest landscape is an intact forest canopy to provide for biodiversity.
- 2.3.1.10. Restrict post-fire timber harvest in recently burned watersheds to levels that maintain an abundance of post-fire snags and logs and allows mature and older forests to develop. Forests that are logged after a severe fire may take longer to return to historic conditions and are depleted of critical wildlife habitat elements. Maintain at least 40% of suitable snags unlogged after wildfire.
- 2.3.1.11. Control Washington Class A and Class B noxious weeds populations using recommended biocontrols, and other non-toxic treatments to avoid unintentional impacts to non-target organisms.
- 2.3.1.12. Coordinate with the Range Department to carefully monitor the ecological condition of wildlife habitat throughout the grazing season to assure that degradation does not occur and that wildlife habitat is maintained in optimal condition. To reduce negative impacts of grazing, significantly reduce livestock stocking levels to match available moisture levels and growing conditions, and give extended periods of rest or deferment to allow for native grass, forb and shrub recovery for wildlife, especially in sharp-tail grouse habitat. Provide input and review of site-specific grazing plans for all

- livestock allotments to help maintain optimal wildlife habitat conditions where livestock occur. Plan for adequate fencing, AUMs, livestock rotation, rest periods from grazing and seasonal timing of livestock on the landscape.
- 2.3.1.13. Work with the Range Department to identify fencing areas that have problems and need to be better maintained on a regular schedule to protect wildlife habitat and sensitive areas.
 - 2.3.1.14. Use locally adapted seeds and native plants to restore habitat for wildlife benefits. Do not use commonly available forage grasses.
 - 2.3.1.15. Restrict off-road vehicles from using critical wildlife habitat for recreational purposes. Sign and fence areas if necessary, and inform law enforcement of infractions and problem areas to watch.

2.3.2. Shrub-Steppe and Grasslands

- 2.3.2.1. Retain all large trees and snags (over 20 inch DBH) near cliffs, rocky outcrops, and in open shrub steppe and grassland communities that provide good roosting, perching, and hunting habitat for golden eagles and other raptors.
- 2.3.2.2. Protect and promote cryptobiotic crust formations – particularly where grazing has not occurred.
- 2.3.2.3. The utilization of livestock forage should be limited to less than 35% grasses and 35% shrubs, and live basal area of native vegetation should be maintained at 50% ground cover or more. End-of-season stubble heights should be at least 2 inches for Kentucky bluegrass, 3 to 4 inches for sedges and short grasses, and at least 4 to 6 inches for larger bunchgrasses.
- 2.3.2.4. Consider utilizing livestock hoof action and foraging (such as goats and sheep) in limited capacity for restoration of shrub-steppe habitat purposes when and where appropriate, and ONLY as part of a larger habitat restoration plan. Special care must be taken to adhere to seasonal timing and rotations of livestock so as not to create detrimental effects on the landscape.

2.3.3. Hydrological series such as riparian and instream habitats, cottonwood galleries, aspen stands, lakes and ponds, wetlands, seeps and springs

- 2.3.3.1. Establish 100+ foot protective buffers surrounding all wetlands, wet meadows, seeps and springs to protect wetland soils, maintain adequate cover and to help maintain stable water temperatures for fish and wildlife.
- 2.3.3.2. Establish appropriate protective buffers surrounding breeding and nesting wildlife and their habitats- see Wildlife Objective 1.5 above.
- 2.3.3.3. Protect concentrations of snags, large trees, and CWD on the water's edge as critical wildlife and nesting habitat- see Wildlife Objective 1.5 above.
- 2.3.3.4. Retain all standing large trees, snags and CWD over 21 inches in diameter (especially cottonwood, aspen, and birch) within 1/2 mile of hydrological features for wildlife nesting, perching, hunting and roosting.
- 2.3.3.5. Maintain 20 tons CWD/acre, equivalent to 20 large logs/acre (> 20 inches diameter) within riparian areas and moist habitats in moist forest east of Sanpoil River.

- 2.3.3.6. Maintain an average of 5 tons/acre, equivalent to the 5 largest logs/acre greater than 20 inches diameter in dry forests west of the Sanpoil River.
- 2.3.3.7. Prevent livestock grazing adjacent to hydrological features using effective fencing when appropriate. Salt licks and water developments should be located at least 20 feet from surface waters to protect water quality.
- 2.3.3.8. Maintain adequate shrub cover near water sources to provide refuge for amphibians, fish and other wildlife species, to help maintain stable water temperatures, and prevent sediment deposition.
- 2.3.3.9. Restore cottonwood galleries by allowing natural flood regimes to exist where possible.
- 2.3.3.10. Promote at least 50% aspen-shrub vegetation cover within 820 feet of existing aspen stands to maintain and increase ungulate and forest grouse habitat.
- 2.3.3.11. Monitor and map aspen stands and identify at-risk stands.
- 2.3.3.12. Remove encroaching conifers to restore aspen stands, retaining all trees older than 100 years, or greater than 27 inches DBH.
- 2.3.3.13. Restore aspen stands using prescribed fire outside of the songbird breeding and nesting seasons (April 15th to June 15th).

2.3.4. Ponderosa Pine Series Forests and Woodlands

- 2.3.4.1. Leave the largest, most fire resistant trees in any stand that are subject to timber harvest or restoration activities. The target goal would be to develop and maintain *at least 4 large ponderosa pines (greater than 24 inches DBH) per acre* in the ponderosa pine forests.
- 2.3.4.2. Manage ponderosa pine stands to retain and create *at least 2 large snags (greater than 20" DBH and greater than 12 foot height) per acre* for cavity nesting species.
- 2.3.4.3. Manage ponderosa pine stands to develop and maintain *at least 2 large logs (greater than 16" DBH and 40 feet long) per acre*.
- 2.3.4.4. Open overstory canopy to <40% tree canopy cover to increase elk & deer, golden eagle, dusky grouse and woodpecker foraging habitat on the landscape.

2.3.5. Douglas-fir Series Forests

- 2.3.5.1. Leave the largest, most fire resistant trees in any stand that is subject to timber harvest or restoration activities. The target goal is to develop and maintain *at least 8 large Douglas fir trees (greater than 24 inches DBH) per acre* in Douglas-fir forests.
- 2.3.5.2. Retain and create *at least 5 large snags per acre (>20 inch DBH, greater than 12 foot height)* used for cavity nesters.
- 2.3.5.3. Manage Douglas-fir stands to develop and maintain *at least 8 large logs (greater than 16" DBH and 40 feet long) per acre*.

2.3.6. Grand Fir Series Forests

- 2.3.6.1. Leave the largest, most fire resistant trees in any stand that is subject to timber harvest or restoration activities. The target goal is to develop and

maintain at least 8 *large trees (greater than 24 inches DBH) per acre* in the grand fir forests.

2.3.6.2. If possible retain all suspected hollow grand fir trees and snags for wildlife. Within 600 acre woodpecker or owl management areas, retain at least *1.5 suspected hollow grand fir trees or snags per acre*.

2.3.6.3. Designate and manage at least *2 trees per acre* of mature grand fir as recruitment trees for future snags.

2.3.6.4. Manage grand fir stands to develop and maintain at least *5 large snags (greater than 20" DBH) per acre*.

2.3.6.5. Manage grand fir stands to develop and maintain at least *8 large logs (greater than 16" DBH and 40 feet long) per acre*.

2.3.7. Western Hemlock Series Forests

2.3.7.1. Leave the largest trees in any stand that is subject to timber harvest or restoration activities. The target goal is to develop and maintain at least *8 large trees (greater than 30 inches DBH) per acre* in the western hemlock series forests.

2.3.7.2. Manage western hemlock series stands to develop and maintain at least *5 large snags (greater than 20" DBH) per acre*.

2.3.7.3. Manage western hemlock series stands to develop and maintain at least *8 large logs (greater than 16" DBH and 40 feet long) per acre*.

2.3.8. Western Redcedar Series Forests

2.3.8.1. Leave the largest trees in any stand that is subject to timber harvest or restoration activities. The target goal is to develop and maintain at least *8 large trees (greater than 30 inches DBH) per acre* in the western redcedar series forests.

2.3.8.2. Manage western redcedar series stands to develop and maintain at least *5 large snags (greater than 20" DBH) per acre*.

2.3.8.3. Manage western redcedar series stands to develop and maintain at least *8 large logs (greater than 16" DBH and 40 feet long) per acre*.

2.3.9. Subalpine Fir Series Forests

2.3.9.1. Maintain quantities of logs and snags to provide suitable habitats for lynx denning, American marten foraging, and forest grouse roosting habitat. Lynx require a minimum of 10% denning habitat and no more than 30% non-habitat.

2.3.9.2. Maintain buffer strips to provide shade and lower temperatures along streams.

2.3.9.3. Restrict post-fire timber harvest in recently burned watersheds to levels that maintain an abundance of post-fire snags and logs and allows mature and older forests to develop.

2.3.9.4. Refer to lynx management guidelines for leave trees, snags, and logs in subalpine fir forests.

2.3.10. Snags and Logs

- 2.3.10.1. Monitor the quantity and quality of snags and logs prior to timber harvest to assure targets will be met post-harvest.
- 2.3.10.2. Where logs and snags cause a fuel management concern, reconfigure the connectivity of fuels to reduce fire spreading hazards.
- 2.3.10.3. See recommendations for snags/acre under each forest series.
- 2.3.10.4. Create snags and logs by designation of mature "legacy trees", that will eventually die and become snags and logs.
- 2.3.10.5. In areas where minimum snag retention guidelines are not met, retain 2 green trees/acre as snag replacement trees.

2.3.11. Cliffs-Talus-Caves

- 2.3.11.1. Include pre-construction surveys and seasonal restrictions in areas where cliffs, talus and cave habitats are present or suspected.
- 2.3.11.2. Provide signs and interpretive media wherever recreational activities occur adjacent to cliffs, talus and cave habitats, to help people appreciate cliff/cave-dwelling species and the fragility of roosting bats and nesting raptors.
- 2.3.11.3. Survey, monitor and document and map cliffs and caves on the Reservation and adopt guidelines to protect wildlife habitat such as bat roosts and maternity colonies, golden eagle nests, falcon eeries, and other cliff/cave dwelling species. Require that permanent developments for homes, wind energy and cell towers, follow siting and zoning guidelines designed to protect cliffs, talus and cave habitats.

2.3.12. Mature and Old Forests: Mature and older forests are valuable both as a timber resource and provide some of the best wildlife habitat on the Reservation. Therefore, an inherent conflict exists between managing this habitat type. The solution to this conflict is to identify some of the old forests to be managed with a special emphasis on wildlife, leaving the rest open for timber production. Tasks and management guidelines for old forest special emphasis management areas are described in detail under Goal 3 of this document. These special management areas allow for some timber cutting, but the management emphasis is on maintaining and improving old forest habitat for wildlife. Tasks and management guidelines for the remaining old forest areas that emphasize timber production are listed below:

- 2.3.12.1. Mistletoe-infected trees should be left whenever possible as wildlife trees, but can be relatively isolated from regenerating trees to curtail infection rates. They can also be girdled to create wildlife snags if needed.
- 2.3.12.2. Retain structural legacy trees from forest harvest stands, and establish growth and harvest trends to produce new large trees, snags, and fallen trees for future forest development and structural diversity for wildlife.
- 2.3.12.3. Maximize the areas identified and managed as old forest special management areas wherever possible, since this is a limiting factor on the Colville Reservation for wildlife.

2.3.13. Biodiversity Hotspots

- 2.3.13.1. Review and improve the criteria used to define biodiversity hotspots on the Reservation. The initial criteria are:
 - Places with the best wildlife habitat conditions
 - Places that support a wide diversity of native plant and animal species
 - Places that have above average biological productivity and support abundant wildlife populations
 - Places that contain the best T&E species presence and habitat conditions
 - Places that contain habitat types in good condition that were once common on the landscape but are now rare due to anthropogenic modifications of the surrounding landscape
- 2.3.13.2. Determine the parameters to be used in identifying biodiversity hotspots on the Reservation. Consider using the following studies, information resources and data:
 - Field surveys, field knowledge, maps and reports produced by CCT natural resource management agencies
 - Publications and data produced by the Washington GAP Analysis Project
 - Publications and data produced by the Washington Wildlife Habitat Connectivity Working Group
 - Wildlife sighting and habitat data maintained by WDFW in their PHS and Heritage databases
 - Rare plant and rare ecosystem data maintained by the Washington Natural Heritage Program of the WA DNR
 - Data maintained by the Global Biodiversity Information Facility
 - Data on roadless areas and unmodified wildlife habitat maintained by Pacific Biodiversity Institute
 - Current Landsat 8 satellite imagery
- 2.3.13.3. Determine the spatial location of biodiversity hotspots on the Reservation using the above data and information resources.
- 2.3.13.4. Maximize the area identified and managed as biodiversity hotspots within the constraints of other resource uses.
- 2.3.13.5. Develop management guidelines for biodiversity hotspots that integrate the needs of a diverse suite of species with the management of timber, grazing and other resource uses.

WL Objective 2.4: Monitor. Monitor sensitive habitats on the Reservation to assess habitat condition for key priority wildlife species and evaluate management efficacy in moving towards desired future conditions.

WL Objective 2.4 Tasks:

- 2.4.1. Obtain and incorporate the most recent science-driven research on wildlife habitat standards and monitoring methods for a suite of game and non-game species into regular IRMP's updates (ongoing).
- 2.4.2. Obtain funding to develop a comprehensive *Habitat Monitoring Strategy* designed to assess habitat condition for key priority species and evaluate management efficacy in moving towards desired future conditions.

- 2.4.3. Refine Sensitivity map layers (Appendix VII) of existing and potential priority habitats.
- 2.4.4. Utilize geospatial analysis techniques to identify key critical habitat areas.

WL Objective 2.5: Prioritize and Restore Native Habitats. Identify, prioritize and restore/enhance wildlife habitat, preferably to native grasses, forbs, shrubs, and trees in areas where appropriate throughout the Reservation.

WL Objective 2.5 Tasks:

- 2.5.1. Collaborate with other departments to identify, protect and restore if appropriate priority habitats for restoration.
- 2.5.2. Continue implementation of the weed control program, utilizing Integrated Pest Management strategies on a minimum of 10% of Wildlife Mitigation Properties per year.
- 2.5.3. Update Restoration Management Plans to restore and improve habitat conditions throughout all ecosystems on the Reservation, especially if deteriorating conditions develop or persist.
- 2.5.4. Work with Range Department to identify and protect sensitive habitats and areas on the Reservation where cattle and domestic/feral livestock have detrimental effects on wildlife and their habitat.
- 2.5.5. Promote native seed sources and restoration of native grasses for long-term ecosystem health in grassland and shrub steppe communities.
- 2.5.6. Develop alternate funding sources to help control feral horse and trespass livestock issues.

WL Objective 2.6: Land Management Plans and Compliance. Support and assist in development and implementation of land management planning and compliance efforts for roads, forestry, land acquisition, fire and fuels, and mitigation to ensure wildlife and their habitats are adequately represented in land management planning.

WL Objective 2.6 Tasks:

- 2.6.1. Participate in the ongoing Road Management Plan development. Including assessing road quality, closure opportunities, habitat effectiveness of roaded areas for wildlife species, and restoration potential.
- 2.6.2. Improve habitat effectiveness by following Forest Practices and Hydraulic Project Codes by assisting BIA Forestry make sure all current timber sale roads, landings, and skid trails are in compliance.
- 2.6.3. Review Forestry Sale proposals and permits for applications to harvest, salvage, or remove trees on the Reservation for commercial or non-commercial logging and provide recommendations and regulations to protect wildlife habitat and its species.
- 2.6.4. Complete and implement site-specific land management plans to protect and/or restore each acquired BPA Mitigation Property within eighteen (18) months of acquisition. Update site-specific management plans on a 5 year basis.
- 2.6.5. Require proposed new developments and construction activities to write a site-specific plan that identifies and maps core and buffer habitats, and identifies all

areas of vegetation clearing, grading, and construction. All construction and trails must be directed away from specific wildlife breeding and nesting areas, and should be required to perform activities outside of the breeding/ nesting/ rearing season.

- 2.6.6. Assess land use activities and limit human impacts to critical and sensitive wildlife areas whenever possible, including alteration of habitat, introduction of non-native fishes and other aquatic vertebrates, and spillage/non-compliance of toxic chemicals.
- 2.6.7. Maintain adequate funding to implement site-specific Operations and Maintenance on acquired mitigation properties. Add specific list of properties and year for implementation.
- 2.6.8. Complete all remaining acquisitions identified by the Mitigation Program, to offset BPA's mitigation crediting ledger.
- 2.6.9. Work with BIA Land Title Records Office to update Title Status Reports to include encumbrances or restrictive uses.

WL Objective 2.7: Reservation Game Reserve Management. Manage the approximately 130,201 total acres in the Hellgate and Omak Lake Game Reserves in order to support healthy and self-sustaining wildlife populations of game and non-game species. Provide special, wildlife-specific, habitat and harvest recommendations within the bounds of the game reserves in order to restore and improve priority habitats and species populations.

WLG 3. Establish special emphasis management areas and maintain connectivity between these areas to help support viable populations of culturally significant wildlife and plant species that will benefit tribal members, enhance habitat for wildlife, restore regional connectivity, and restore functioning ecosystems across the Reservation.

WL Objective 3.1: Develop special emphasis management areas that emphasize plant communities within older moist forest ecosystems (such as Douglas-fir, grand fir, western hemlock, western redcedar, and subalpine fir) on the Reservation. Within these areas, improve and restore the quality of habitat required to sustain old moist forest dependent communities of terrestrial and aquatic fish and wildlife, plants, soils, and natural resources at a watershed scale.

WL Objective 3.1 Tasks:

- 3.1.1. Determine the parameters to be used in identifying special emphasis management areas that focus on the old forest habitat on the Reservation.
- 3.1.2. Determine the possible extent of old forest special emphasis management areas, within the constraints of timber harvest, roads, livestock grazing, and other management considerations.
- 3.1.3. Determine suitable management guidelines for old forest special emphasis management areas. These management guidelines follow Wildlife Goal 2 and its habitat objectives, however Task 3.1.3 allocates additional protection measures and special emphasis on wildlife habitat, regional connectivity, and forest health.

- Retain at least 50% canopy cover as cover and security habitat for old forest dependent species.
 - Protect old trees and snags greater than 20 inch DBH for nesting, roosting and foraging habitat.
 - Protect a variety of forest stand patterns which include patches of trees/acre > 12 inches DBH, 8 trees/acre > 24 inches DBH, and at least 6 large logs/acres >16 inches diameter to provide adequate nesting, denning, foraging, and roosting habitat for all old moist forest dependent species.
 - Maintain minimum patches of old forest habitat 1,000-2,500 acres in size to reduce fragmentation and increase connectivity.
 - Protect >300 foot buffers within old forest special emphasis areas surrounding ponds, riparian areas, ridgelines, drainages, saddles, <40% slopes, and perennial water and streams for wildlife travel, foraging, and connectivity on the regional landscape.
 - Provide adequate and patchy distribution of shrub cover on the forest floor for foraging and security habitat.
 - Reduce road densities or retain roadless landscapes in special emphasis areas to reduce fragmentation for old forest dependent species.
- 3.1.4. Determine optimal locations for old forest special emphasis management areas.
- 3.1.5. Incorporate as many important wildlife features into old forest special emphasis management areas as possible.
- 3.1.6. Work with other tribal departments to ensure that old forest special emphasis management areas are managed to maximize their benefit to wildlife, forest health, stream ecology, soil conditions, and watershed health on the Reservation.
- 3.1.7. Partner with Tribal, State and Federal agencies to incorporate the best scientific and culturally acceptable management measures that ensure long-term health of forests and viable populations of wildlife that utilize old forest special emphasis management areas.

WL Objective 3.2: Develop special emphasis management areas that emphasize healthy ponderosa pine forests. Within these areas, improve and restore the quality and quantity of habitat in the ponderosa pine ecosystem to sustain wildlife species dependent on older ponderosa pine forests. These include snag-dependent and fire adapted communities of terrestrial and aquatic fish and wildlife, plants, soils, and natural resources at a watershed scale.

WL Objective 3.2 Tasks:

- 3.2.1. Identify large areas of ponderosa pine forest that contain a mixture of old and young stands which can be maintained and improved to provide optimal habitat conditions for wildlife dependent on older ponderosa pine forests with a natural fire regime.
- 3.2.2. Determine the parameters to be used in improving and restoring ponderosa pine forests to benefit wildlife.
- 3.2.3. Incorporate important wildlife features into ponderosa pine special emphasis management areas.

- 3.2.4. Determine the possible extent of this reserve system, within the constraints of timber harvest, livestock grazing, roads, and other management considerations.
- 3.2.5. Develop management guidelines for ponderosa pine special emphasis management areas. These management guidelines follow Wildlife Goal 2 and its habitat objectives, however Task 3.2.5 allocates additional protection measures and special emphasis on wildlife habitat regional connectivity, and forest health.
 - Retain 8 large live ponderosa pine trees and 2 large snags /acre >20 inches DBH for nesting, foraging and roosting habitat.
 - Retain an additional forest density of at least 3 snags/acre of various size classes.
 - Protect large trees and snags <1500 feet from cliffs for important nesting and perching locations for raptors.
 - Protect and link special features on the landscape such as shrub-steppe and grasslands, and cliffs and rocky outcrops.
 - Ensure all legacy trees greater than 21 inches in diameter are retained in salvage-logging operations.
 - Maintain patches of up to 2 large snags/acre and 6 small snags/acre (or recruitment trees) throughout the watershed after wildfire.
 - Create blocks of older ponderosa pine habitat from 1,000 to 2,500 acres in size to allow connectivity for migratory species.
 - Promote 10% shrub cover and 40-75% native grasses and forbs in open meadows throughout ponderosa pine forests.
- 3.2.6. Determine the optimal spatial location ponderosa pine special emphasis management areas.
- 3.2.7. Work with other tribal departments to ensure that ponderosa pine forests are managed to maximize their benefit to wildlife, forest health, stream ecology, soil conditions, and watershed health on the Reservation.
- 3.2.8. Partner with Tribal, State and Federal agencies to incorporate the best scientific and culturally acceptable management measures that ensure long-term health of forests and viable populations of wildlife that utilize ponderosa pine forests across the region.
- 3.2.9. Implement fire and fuel management that mimics the historic fire regime (7-20 year cycles).
- 3.2.10. Recommend silvicultural treatments that maintain optimal habitat conditions for wildlife.
- 3.2.11. Manage livestock grazing to reduce impacts on the understory of pine ecosystems.
- 3.2.12. Monitor and use adaptive management/restoration treatments to reduce invasive plant species.

WL Objective 3.3: Develop special emphasis management areas that emphasize healthy riparian ecosystems. Within these areas, improve and restore the quality and quantity of riparian habitat to sustain aquatic and terrestrial communities of fish and wildlife, plants, soils, and natural resources at a watershed scale. These riparian management areas should be designed to provide and improve connectivity between other special emphasis areas inside and outside of the Reservation.

WL Objective 3.3 Tasks:

- 3.3.1. Determine the parameters to be used in development of riparian special emphasis management areas that benefit wildlife.
- 3.3.2. Determine amount of riparian special emphasis management areas that can be allocated, within the constraints of timber harvest, livestock grazing, roads, and other management considerations.
- 3.3.3. Determine adequate management guidelines for riparian special emphasis management areas. These management guidelines follow Wildlife Goal 2 and its habitat objectives, however Task 3.3.3 allocates additional protection measures and special emphasis on wildlife habitat regional connectivity, and forest health.
 - Maintain all sizes, decay classes, and lengths of logs and snags within 300 feet of streams.
 - Maintain connectivity between old forests and riparian areas, limiting tree harvest to within a 300 foot buffer of streams and riparian areas.
 - Protect all large trees and snags >21 inches DBH within riparian setbacks and in the bottom 1/3 of drainages as important wildlife hunting perches, nesting, denning, foraging and cover habitat.
 - Restore and maintain a dense native shrub cover throughout riparian designated habitats, focusing on dry riparian draws, riverine/cottonwood galleries, and wetland associated plant communities in meadows and wetlands.
 - Designate riparian setbacks and restrict ground-disturbing management activities > 300 feet from perennial streams, to protect wildlife corridors, connectivity between habitats, foraging and cover habitat.
 - Avoid all roading and logging in cottonwood galleries and riparian area setbacks.
 - Implement grazing management standards and enforcement that avoids grazing within riparian areas and cottonwood stands and removes livestock that become a problem.
 - Provide bridges and culverts at all stream crossings sufficient to contain a 100-year flood; encourage natural flooding and disturbance regimes whenever possible.
- 3.3.4. Determine the optimal spatial location and configuration of riparian special emphasis management areas.
- 3.3.5. Work with other tribal departments to ensure that riparian special emphasis management areas are managed to maximize their benefit to wildlife, forest health, stream ecology, soil conditions, and watershed health on the Reservation.
- 3.3.6. Partner with Tribal, State and Federal agencies to incorporate the best scientific and culturally acceptable management measures that ensure long-term health of forests and viable populations of wildlife that utilize riparian special emphasis management areas across the region.

WL Objective 3.4: Develop special emphasis management areas that emphasize healthy shrub-steppe ecosystems. Within these areas, improve and restore the quality and quantity of shrub-steppe and associated habitat to sustain terrestrial communities of wildlife, plants, soils, and natural resources at a landscape scale. These management areas should be designed to provide and improve connectivity between other special emphasis areas inside and outside of the Reservation.

WL Objective 3.4 Tasks:

- 3.4.1. Determine the parameters to be used in development of shrub-steppe special emphasis management areas that benefit wildlife.
- 3.3.1. Determine amount of shrub-steppe special emphasis management areas that can be allocated, within the constraints of livestock grazing, roads, and other management considerations.
- 3.3.2. Determine adequate management guidelines for shrub-steppe special emphasis management areas. These management guidelines follow Wildlife Goal 2 and its habitat objectives, however Task 3.4.3 allocates additional protection measures and special emphasis on wildlife habitat regional connectivity.
 - Maintain shrub-steppe special emphasis areas in optimal ecological condition that puts a strong emphasis on native plants and wildlife.
 - Maintain connectivity between shrub-steppe areas.
 - Use periodic prescribed fire in shrub-steppe special emphasis areas to maintain ecological health and enhance fire-dependent native species.
 - Limit livestock grazing to levels where no damage occurs to native plant or animal species. If this cannot be accomplished, restrict livestock grazing from shrub-steppe special emphasis areas.
 - Manage shrubby draws and riparian ecosystems for the benefit of riparian and upland wildlife species that depend on these special habitat areas. Shrubby draws are a biodiversity hotspot within the shrub-steppe ecosystem.
 - Restrict new road development in the special emphasis areas.
- 3.3.3. Determine the optimal spatial location and configuration of shrub-steppe special emphasis management areas.
- 3.3.4. Work with other tribal departments to ensure that shrub-steppe special emphasis management areas are managed to maximize their benefit to tribal members, wildlife, native plants, soil conditions, and watershed health on the Reservation.
- 3.3.5. Partner with Tribal, State and Federal agencies to incorporate the best scientific and culturally acceptable management measures that ensure long-term ecological health and viable populations of wildlife that utilize shrub-steppe special emphasis management areas across the region.

WL Objective 3.5: Develop special emphasis management areas that emphasize healthy grassland and meadow ecosystems. Within these areas, improve and restore the quality and quantity of grassland and/or meadow habitats to sustain terrestrial communities of wildlife, plants, soils, and natural resources at a landscape scale. These management areas should be designed to provide and improve connectivity between other special emphasis areas inside and outside of the Reservation.

WL Objective 3.5 Tasks:

- 3.4.1. Determine the parameters to be used in development of grassland and meadow special emphasis management areas that benefit wildlife.
- 3.4.2. Determine amount of grassland and meadow special emphasis management areas that can be allocated, within the constraints of livestock grazing, roads, and other management considerations.

- 3.4.3. Determine adequate management guidelines for grassland and meadow special emphasis management areas. These management guidelines follow Wildlife Goal 2 and its habitat objectives, however Task 3.5.3 allocates additional protection measures and special emphasis on wildlife habitat regional connectivity.
- Maintain grassland and meadow special emphasis areas in optimal ecological condition that puts a strong emphasis on native plants and wildlife.
 - Maintain connectivity between grassland and meadow areas.
 - Use periodic prescribed fire in grassland and meadow special emphasis areas to maintain ecological health and enhance fire-dependent native species.
 - Limit livestock grazing to levels where no damage occurs to native plant or animal species. If this cannot be accomplished, restrict livestock grazing from grassland and meadow special emphasis areas.
 - Manage shrubby draws and riparian ecosystems for the benefit of riparian and upland wildlife species that depend on these important habitat areas. Shrubby draws are a biodiversity hotspot within the grassland and meadow ecosystem.
 - Restrict new road development in the special emphasis areas.
- 3.4.4. Determine the optimal spatial location and configuration of grassland and meadow special emphasis management areas.
- 3.4.5. Work with other tribal departments to ensure that grassland and meadow special emphasis management areas are managed to maximize their benefit to tribal members, wildlife, native plants, soil conditions, and watershed health on the Reservation.
- 3.4.6. Partner with Tribal, State and Federal agencies to incorporate the best scientific and culturally acceptable management measures that ensure long-term ecological health and viable populations of wildlife that utilize grassland and meadow special emphasis management areas across the region.

WL Objective 3.6: Develop special emphasis management areas that emphasize healthy critical big game winter range areas. Within these areas, improve and restore the quality and quantity of critical winter range habitats to sustain productive and thriving big game populations in order to provide adequate subsistence opportunities to the Tribal Membership. These management areas should be designed to provide all aspects of a functioning winter range including: snow intercept, adequate winter forage, escapement cover, reduced disturbance regimes, and adequate space to limit disease transmission.

WL Objective 3.6 Tasks:

- 3.5.1. Determine the parameters to be used in development of big game winter range special emphasis management areas that benefit wildlife.
- 3.5.2. Determine amount of big game winter range special emphasis management areas that can be allocated, within the constraints of livestock grazing, roads, and other management considerations.
- 3.5.3. Determine adequate management guidelines for big game winter range special emphasis management areas. These management guidelines follow Wildlife Goal 2 and its habitat objectives, however Task 3.5.3 allocates additional protection measures and special emphasis on wildlife habitat regional connectivity.

- Maintain big game winter range special emphasis areas in optimal ecological condition that puts a strong emphasis on big game and other wildlife.
 - Maintain connectivity between big game winter range areas.
 - Use periodic prescribed fire in big game winter range special emphasis areas to maintain ecological health, enhance fire-dependent native species and provide optimal big game winter range conditions.
 - Limit livestock grazing to levels where no damage occurs to native plant or animal species. If this cannot be accomplished, restrict livestock grazing from big game winter range special emphasis areas.
 - Manage shrubby draws and riparian ecosystems for the benefit of riparian and upland wildlife species that depend on these important habitat areas. Shrubby draws are a biodiversity hotspot within big game winter range.
 - Restrict new road development in the special emphasis areas.
- 3.5.4. Determine the optimal spatial location and configuration of big game winter range special emphasis management areas.
- 3.5.5. Work with other tribal departments to ensure that big game winter range special emphasis management areas are managed to maximize their benefit to tribal members, wildlife, native plants, soil conditions, and watershed health on the Reservation.
- 3.5.6. Partner with Tribal, State and Federal agencies to incorporate the best scientific and culturally acceptable management measures that ensure long-term ecological health and viable populations of wildlife that utilize big game winter range special emphasis management areas across the region.

WLG 4. Increase overall visibility and engagement of tribal wildlife department in promoting regional wildlife management activities and projects, cultural and subsistent use of wildlife and habitat resources, and effective natural resource science education.

WL Objective 4.1: Local Outreach. Use local media (newsletters, newspapers, social media online, and schools) to promote and create a culture of pride and support towards wildlife, wildlife habitat, wildlife conservation and wildlife management activities on the Reservation, the North Half, and within the Tribes' Aboriginal Territories.

WL Objective 4.1 Tasks:

- 4.1.1. Work with local schools to develop programs that teach children on the Reservation respect and the importance of ecosystem health, landscape ecology, and wildlife management.
- 4.1.2. Participate in local outreach in hunting, fishing and wildlife related events/programs both on the Reservation and in nearby communities on the North Half and Aboriginal Territories.
- 4.1.3. Outreach to non-profit and conservation groups to gain active support for wildlife management activities

WL Objective 4.2. Regional Representation. Regional representation by tribal fish and wildlife biologists to ensure interests pertaining to State and Federal resource

management activities on the Reservation, the North Half, and within the Tribes' Aboriginal Territories are adequately represented.

WL Objective 4.2 Tasks:

- 4.2.1 Participate in the Washington State Timber, Fish, and Wildlife/Forest and Fish programs.
- 4.2.2 Review and comment on Federal and State land management plans and project proposals.
- 4.2.3 Review and comment on Federal and State wildlife management plans and project proposals, including those pertaining to T&E species.
- 4.2.4 Participate in cooperative surveys with WDFW, USFWS, USFS, BC Ministry of the Environment, Okanogan Nation Alliance (ONA), and other regional Tribes conducted on the North Half and Aboriginal Territories.
- 4.2.5 Conduct annual meeting with WDFW to discuss and comment on North Half co-managed hunting season proposals for regions 1 and 2.
- 4.2.6 Conduct periodic meetings with USFWS, USFS, BC Ministry of the Environment, Okanogan Nation Alliance (ONA), Upper Columbia United Tribes (UCUT), other regional Tribes, or other agencies that may affect wildlife and/or their habitats within the Reservation, North Half, and/or aboriginal territories.
- 4.2.7 Coordinate Tribal T&E species efforts with those of agencies responsible for resource management within the North Half and Aboriginal Territories.

WLG 5. Maintain the health and safety of Colville Reservation, North Half and Aboriginal Territory residents.

WL Objective 5.1. Public Health and Safety. Minimize wildlife related threats to public health, safety, and property on the Colville Reservation, North Half and Aboriginal Territories.

Objective 5.1. Tasks:

- 5.1.1. Develop and implement a prioritized Dangerous Wildlife Management/Response Plan for Tribal and non-Tribal members.
- 5.1.2. Collaborate with Washington Department of Fish and Wildlife in management of dangerous wildlife on the North Half.
- 5.1.3. Develop and distribute wildlife disease fact sheets which include information on reducing risk of exposure.
- 5.1.4. Develop and distribute "living with wildlife" fact sheets.
- 5.1.5. Inform membership on the negative consequence of providing supplemental feed to wildlife.
- 5.1.6. Develop and implement protocols for handling diseased, injured, and dead wildlife.
- 5.1.7. Monitor nuisance wildlife using various wildlife techniques.
- 5.1.8. Provide timely response (immediate or within 48 hours, depending upon complaint) to nuisance and dangerous wild animal complaints.

- 5.1.9. Develop brochures, fact sheets, and newsletter pieces in an effort to educate on the importance of safety and prevention of predators such as bears, cougars, wolves, and coyotes.

WLG 6. Determine and begin to mitigate for the terrestrial wildlife impacts related to the operations and secondary effects of Grand Coulee Dam and Chief Joseph Dam.

WL Objective 6.1. Dam Impacts. Determine the operational and secondary impacts from Grand Coulee and Chief Joseph Dams related to terrestrial wildlife species.

WL Objective 6.1. Tasks:

- 6.1.1. Develop and implement a Grand Coulee Dam and Chief Joseph Dam Operational and Secondary Wildlife Loss Assessment in collaboration with other Tribal, State, and Federal Agencies, and funded by the Bonneville Power Administration (BPA).

WL Objective 6.2. Mitigation. Mitigate for operational and secondary impacts on the Colville Reservation based on the Grand Coulee Dam and Chief Joseph Dam Operational and Secondary Wildlife Loss Assessment.

WL Objective 6.2 Tasks:

- 6.2.1. Develop and implement a mitigation strategy based on the Operational and Secondary Wildlife Loss Assessment and funded by the BPA.

WLG 7. Maintain resilient ecosystems in response to climate change and disturbance events

WL Objective 7.1. Collaborate and coordinate with all other tribal agencies and regional partners to learn as much as possible about the effects of climate change on the modification of disturbance regimes.

WL Objective 7.2. Through coordination efforts with multiple agencies monitor changes occurring in relation to climate change and habitat connectivity and wildlife populations.

WL Objective 7.3. Work with all other tribal agencies and regional partners to plan the appropriate responses to ensure that ecosystems on the Reservation are managed to be as resilient as possible to an increase in large-scale disturbance events.

ACKNOWLEDGEMENTS

The *Fish and Wildlife Resource Management Plan and Five Year Implementation Schedule* (FWP) contains the goals, objectives and strategies that we believe will provide for and protect the fish and wildlife resources within the boundaries of the Reservation, ceded lands, boundary waters, and Usual and Accustomed areas for the benefit of present and future generations of Colville Tribal Members.

The contents of the first Fish and Wildlife 5 Year Management Plan, and its Resource Management Unit (RMU) planning direction, are acknowledged to be based on the *Colville Indian Reservation Integrated Resource Management Plan 2000 - 2014 FEIS* (CCT 2000), including Phase I and Phase II, as well as on direction contained within the *Colville Indian Reservation Record of Decision and Plan for Integrated Resources Management 2000 – 2014* (Klock 2001). The Lake Roosevelt, Lake Rufus Woods, and Okanogan Sub basin plans were also influential in the development of this Fish and Wildlife plan, providing focus for specific management objectives and strategies.

The contents of the second Fish and Wildlife 5 Year Management Plan is a continuation of the years 2007-2011 with notable changes that reflect the current goals and objections of the Department. The Colville Indian Reservation Integrated Resource Management Plan (IRMP) 2000-2014 is in the midst of a redraft. The management team at Fish and Wildlife will ensure the 5 Year Management Plan aligns with any significant changes that may arise as a result of the redraft.

Acknowledgement also goes to the staff of the Colville Fish and Wildlife Department for their participation in the development of this document, as well as to members of the Natural Resources 3-P team and individual Tribal Members who provided thoughtful review and comments on the draft Fish and Wildlife Management Plan. Recommended Citation: Fish and Wildlife Department, 2006

Fish and Wildlife Resource Management Plan and Five Year Implementation Schedule, 2007-2011. Confederated Tribes of the Colville Reservation, Nespelem, WA.

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