

OVERVIEW

The approach and methods used by the Washington Department of Fish and Wildlife (WDFW) in developing the Comprehensive Wildlife Conservation Strategy (CWCS) were determined or influenced by a number of factors, including Congressional appropriations language, Guiding Principles from the International Association of Fish and Wildlife Agencies (IAFWA), instructions from the National Advisory and Acceptance Team (NAAT) and our own Guiding Principles, which are provided below and explained in Chapter I, Introduction and Background.

A. Identify Species of Greatest Conservation Need

Guiding Principle 1: "Leave no species behind." Address the conservation of species and habitats with identified greatest conservation need, while recognizing the importance of keeping common species common.

There are two different ways to view the conservation and management of wildlife and wildlife habitat, at any level. One is to see wildlife species and populations as the products or outputs of conservation, with habitat conservation being the primary avenue for ensuring healthy, sustainable wildlife populations. The other is to see habitat conservation as the conservation objective, with wildlife populations as a necessary function or product of good habitat conservation. Either approach or mindset can yield sound wildlife conservation, and both are observed and practiced by wildlife conservation agencies across the United States.



The Washington Department of Fish and Wildlife (WDFW) has invested in the proposition that the identification and conservation of habitat across the landscape is the best way to ensure the long-term survival and productivity of the state's fish and wildlife resources. This management philosophy began in the 1940s, when WDFW initiated a visionary program of acquiring wildlife habitat, and continues today with a strong focus on conserving important habitat on both public and private land, through both regulatory and non-regulatory means. WDFW currently owns or controls about 840,000 acres of wildlife habitat statewide. A statewide discussion of Wildlife Species Distribution, Status and WDFW Management Priorities is included in Chapter III, State Overview.

It is WDFW's considered view that Congress' intent in establishing and funding the State Wildlife Grants Program was to promote the development of species-driven state CWCS documents with emphasis on those species that are not hunted or fished and for which funding is unavailable or limited. Our interpretation is that Congress and the National Advisory and Acceptance Team (NAAT) have directed that all elements of the Washington CWCS be driven by the state Species of Greatest Conservation Need list, which was developed over a period of months by WDFW, in consultation with our public and private conservation partners.

The process of developing a Species of Greatest Conservation Need (SGCN) list began in the spring of 2004. Our initial approach was to tie together all the various fish and wildlife species included on existing priority species lists, including WDFW's Priority Habitat and Species (PHS), the Global and State species rankings adopted by the Washington Natural Heritage Program, and the various target species identified in the ecoregional assessments (EAs) being developed by WDFW, in partnership with the Washington Department of Natural Resources and The Nature Conservancy. Our reason for selecting these specific, vetted lists was that they had already undergone considerable scientific peer review and public involvement. Following is a list of sources and their descriptions:

WDFW Priority Habitats and Species (PHS): The PHS List is a catalog of habitats and species considered to be priorities for conservation and management. Priority species require protective measures for their perpetuation due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance. Priority species include Federal Endangered and Threatened species, State Endangered, Threatened, Sensitive and Candidate species; animal aggregations considered vulnerable; and those species of recreational, commercial, or tribal importance that are vulnerable. <http://wdfw.wa.gov/hab/phspage.htm>

WDFW Species of Concern: This list includes only native Washington fish and wildlife species that are listed as endangered, threatened, or sensitive, or as candidates for these designations. The list also incorporates all federally listed threatened and endangered fish and wildlife species. Endangered, threatened, and sensitive species are legally established in Washington Administrative Codes. Candidate species are established by WDFW policy. Washington State monitor species are those that require management, survey, or data emphasis for one or more of the following reasons: 1) they were classified as endangered, threatened, or sensitive within the previous five years; 2) they require habitat that is of limited availability during some portion of their life cycle; 3) they are indicators of environmental quality; and 4) there are unresolved taxonomic questions that may affect their candidacy for listing as endangered, threatened or sensitive species. Go to: <http://wdfw.wa.gov/wlm/diversty/soc/concern.htm>

Washington Natural Heritage Program: The Washington Natural Heritage Program (WNHP) is located within the Washington Department of Natural Resources. The primary tool used by WNHP to prioritize individual plant and animal species is the global and state ranking system used by NatureServe and its member Natural Heritage programs.

The ranking system used by NatureServe and WNHP facilitates a quick assessment of a species' rarity. For individual species, the global and state ranks are used as the starting point in the process of assigning priorities. Each rated species is then assigned one of the following priority rankings:

Priority 1: These species are in danger of extinction across their range, including Washington. Their populations are critically low or their habitats are significant degraded or reduced.

Priority 2: These species may become endangered across their range or in Washington if factors contributing to their decline or habitat loss continue.

Priority 3: These species are vulnerable or declining and could become endangered or threatened throughout their range without active management or removal of threats to their existence.

New information provided by field surveys, monitoring activities, consultation and literature review improves accuracy and keeps rankings current. Each month, four to seven local data centers exchange data with NatureServe to achieve a network-wide data exchange over the course of a year. Therefore, the subnational rankings presented in NatureServe Explorer are only as current as the last data exchange with each local data center coupled with the latest site update. This data is always shown in the small print provided with each report.

For more information on NatureServe, go to NatureServe's website at <http://www.natureserve.org>. For more information on the Washington Natural Heritage Program, go to: <http://www.dnr.wa.gov/nhp/>

Ecoregional Assessments (EA): The ecoregional assessments being developed by WDFW and other public and private partners are explained in more detail later in this chapter, in Chapter VI, Washington's Ecoregional Conservation Strategy, and in Appendix 12. Animal target species for EAs were chosen from the following groups:

Imperiled species are those having a global rank of G1, G2 or G3, as determined by the Washington Natural Heritage Program.

Imperiled subspecies are those having a global rank of T1, T2 or T3, as determined by the Washington Natural Heritage Program.

Government classified are those listed as endangered or threatened or proposed for listing by the U.S. Fish and Wildlife Service or National Marine Fisheries Service.

Species of special concern include:

- Species of state concern that are 1) ranked as S1, S2 or S3 by Washington Natural Heritage Program, or 2) listed or candidates for listing as endangered or threatened by WDFW.

- Declining species that 1) have exhibited a significant, long-term decline in habitat and/or numbers, and 2) are subject to a continuing high degree of threat.
- Endemic species restricted to the ecoregion or part of the ecoregion. We defined endemic as one for at which at least 75 percent of its geographic range occurs in the ecoregion.
- Disjunct species with populations that are geographically isolated from populations in other ecoregions.
- Vulnerable species are usually abundant, may not be declining, but some aspect of their life history makes them especially vulnerable, such as habitats needed for migratory stopovers or winter range.
- Keystone species are those whose impact on a community or ecological system is disproportionately large for their abundance. They contribute to ecosystem function in a unique and significant manner through their activities. Their removal causes major changes in community composition.
- Wide-ranging species that depend on vast areas. These species include top-level predators such as the gray wolf and northern goshawk. Wide-ranging species can be especially useful in examining linkages among conservation areas in a true conservation network.
- Globally significant examples of species aggregations like migratory stopover sites or overwintering areas that contain significant numbers of individuals of many species.
- Partners in Flight (PIF) species for whom a conservation priority score for a species indicated need for special attention. This guideline applies only to birds.
- Species guilds are groups of species that share common ecological processes or patterns. It is often more practical to target such groups as opposed to each individual species of concern.

Partners In Flight (PIF): Partners In Flight is an international partnership to document and reverse the decline of Neotropical migratory birds. The Partners in Flight species assessment system uses six criteria, each scored from one to five, to rank or categorize species at the national level. These criteria are meant to assess the overall vulnerability of the species to endangerment and have been added together to give an overall ranking. The highest possible score is 30, indicating the greatest vulnerability, and the lowest possible score is 6, which indicates a secure species. Go to: <http://www.partnersinflight.org/>



Process and Criteria Used to Develop the Species of Greatest Conservation Need List:

Species Ranking Criteria: In developing the Species of Greatest Conservation Need list for Washington, WDFW considered about 700 terrestrial, aquatic and marine species—both vertebrates and invertebrates—that were ranked by the five species conservation programs listed above. Then, using the expertise of WDFW staff and invited taxa experts from other agencies, an initial draft list of SGCN was produced in the form of an Excel matrix that included a number of fields, including source species lists, associated habitats and management and species recovery plans. This matrix was heavily weighted toward species that had already been recognized as being in trouble and therefore listed on federal and state lists of endangered, threatened and sensitive species lists.

This initial SGCN list was presented to the Washington CWCS Advisory Committee in a workshop held on May 27, 2004. The Advisory Committee’s reaction was positive regarding the development of the matrix itself; however, they felt that the list overlooked or discounted many species for which we do not yet have adequate information, species that are underfunded for conservation, and species that have “fallen through the cracks”—in that they may be headed for trouble but have not yet been included on state or federal species of concern lists. The Advisory Committee also felt that the list did not adequately reflect one of our guiding principles: “keeping common species common”.

After the May 27, 2004 meeting with the Advisory Committee, we developed a new process and new criteria for developing a Species of Greatest Conservation Need list for the Washington CWCS. The following table shows the criteria used to develop this new species list. The criteria guidelines were designed to not only consider the biological needs of fish and wildlife species, but also other factors such as the extent of current knowledge about the species, current expenditures, and conservation measures already in place to protect the species or its habitat. These new criteria were drafted by WDFW’s Wildlife Program and were given a thorough peer review within WDFW and approved by members of the CWCS Advisory Committee. The criteria were then given to members of the taxa expert review teams to use as guidance in their rankings. A list of taxa committee members is included as Appendix 11.



WASHINGTON CWCS SPECIES RANKING CRITERIA

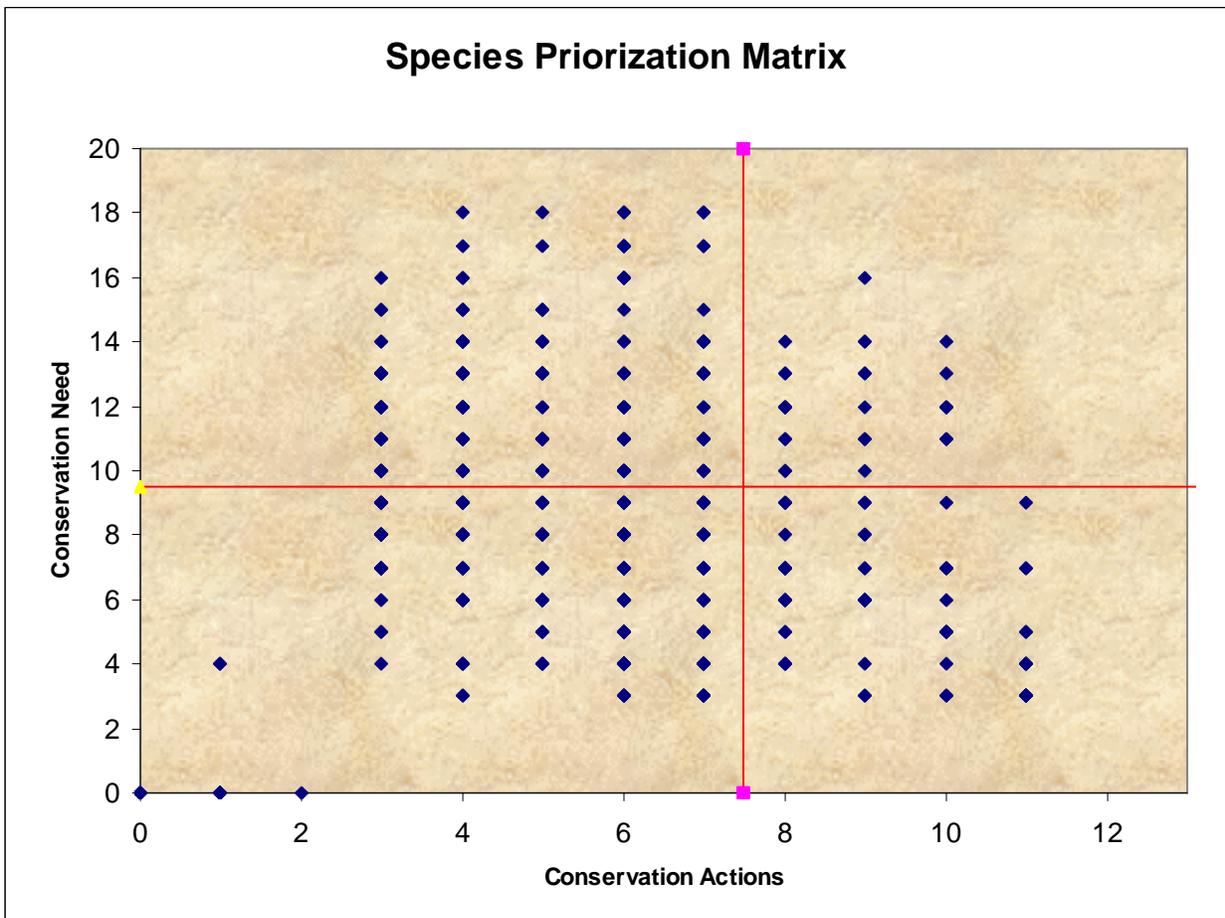
FACTOR	CRITERIA	NOTES																																												
I. CONSERVATION CONCERNS – Y AXIS (High score = high priority)																																														
THREATS	<p>Number of threats Irreversibility, immediacy of threats Rank 1 through 5</p> <p>1 = Low threat 3 = Medium threat 5 = High threat</p> <p>Threats are to be considered for WA only unless species is migratory and has a known limiting factor outside the state.</p>	<p>Threats are defined as human-caused impacts.</p> <p>WA state actions may not be restricted to addressing threats within the state. For example, funds might be used to attend international conferences for the conservation of a particular species.</p> <p>A species with different threats in different regions can be treated as different species in the matrix, i.e. western meadowlark (westside) and western meadowlark (eastside)</p>																																												
CURRENT STATUS	<p>Degree of concern (WDFW listings, National Heritage Program global and state rankings). Automatically calculated in spreadsheet using assigned values for each rank.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="2">WDFW</th> <th colspan="2">NHP</th> </tr> </thead> <tbody> <tr> <td>E</td> <td>3</td> <td>G1</td> <td>3</td> </tr> <tr> <td>T</td> <td>3</td> <td>G2</td> <td>3</td> </tr> <tr> <td>S</td> <td>2</td> <td>G3</td> <td>2</td> </tr> <tr> <td>C</td> <td>2</td> <td>G4</td> <td>1</td> </tr> <tr> <td>M</td> <td>1</td> <td>G5</td> <td>0</td> </tr> <tr> <td></td> <td></td> <td>S1</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>S2</td> <td>3</td> </tr> <tr> <td></td> <td></td> <td>S3</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>S4</td> <td>1</td> </tr> <tr> <td></td> <td></td> <td>S5</td> <td>0</td> </tr> </tbody> </table>	WDFW		NHP		E	3	G1	3	T	3	G2	3	S	2	G3	2	C	2	G4	1	M	1	G5	0			S1	3			S2	3			S3	2			S4	1			S5	0	<p>Where a species has dual rankings, the ranking of highest concern was chosen for consideration.</p> <p>Number values for each rank were assigned by expert judgment.</p> <p>Species with too little information for ranking (i.e. GU or SU) were not assigned a value. Expert judgment will be needed on a species-by-species basis.</p> <p>Rank 1 through 3</p> <p>1 = Low status 2 = Medium status 3 = High status</p>
WDFW		NHP																																												
E	3	G1	3																																											
T	3	G2	3																																											
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SOCIO/ ECONOMIC VALUE	<p>Rank 1 through 3</p> <p>1 = Low value 2 = Medium value 3 = High value</p>	<p>Cultural icon (i.e. tribal) Commercial/game species Non-consumptive recreational Flagship species Keystone species Indicator species</p>																																												
VULNERABLE	<p>Rank 1 through 5</p> <p>1 = Low vulnerability 3 = Medium vulnerability 5 = High vulnerability</p>	<p>Vulnerability is defined through elements of life history.</p> <p>Reproductive mechanisms Scale of endemism Specialist Restricted distribution Peripheral range (breeding vs. non)</p>																																												

FACTOR	CRITERIA	NOTES
CONSERVATION ACTIONS – X AXIS (High score = low priority)		
KNOWLEDGE	<p>Adequate knowledge to manage species in the state of Washington.</p> <p>1 = Low knowledge in WA 2 = Medium knowledge in WA 3 = High knowledge in WA</p>	<p>Knowledge of species applicable to Washington populations.</p> <p>Example: Consider ecological relationships, limiting factors, population dynamics.</p>
EXPENDITURES	<p>Non-SWG sources of funding available or being used</p> <p>1 = Inadequate 2 = Partly adequate 3 = Mostly adequate</p>	<p>Based on what you know, give us your opinion.</p> <p>Example: 1 = <\$50K 2 = \$50K - \$500K 3 = >\$500K</p>
ADEQUACY OF CONSERVATION MEASURES IN PLACE	<p>Amount of current protection related to species need:</p> <p>1 = Inadequate 3 = Partly adequate 5 = Mostly adequate</p>	<p>Consider the following:</p> <ul style="list-style-type: none"> Regulation Planning efforts Acquisition Easement Population manipulation Enforcement/compliance Education Community involvement/concern Mitigation

EXAMPLE of Conservation Measures for the Northern Spotted Owl: Resulting score would be a 3.

CONSERVATION MEASURES	INADEQUATE	PARTLY ADEQUATE	MOSTLY ADEQUATE
Regulation		x	
Planning efforts		x	
Acquisition		x	
Easement		--	
Population manipulation	x		
Enforcement/compliance	x		
Education		x	
Community involvement/concern		x	
Mitigation	x		

Points were assigned to each criterion in the “Conservation Concerns” section and in the “Conservation Actions” section of the ranking matrix. The criteria were grouped into two main categories: 1) Conservation Concerns factors related to current ecological condition of the species, and 2) Conservation Actions factors related to the level of conservation attention currently given to each species. Criteria were totaled for each main factor. Totals for Conservation Concerns factors were plotted against the totals for Conservation Actions factors. A draft threshold was selected at the mid-point of each axis to divide the species list into four quarters. Species whose total points fell **above** the cutoff number for “Concerns” and **below** the cutoff number for “Actions” (i.e., the upper left quartile on the following scatter plot) were placed on the Species of Greatest Conservation Need (SGCN) list. Final thresholds were selected by expert opinion within the WDFW Wildlife Diversity Division to ensure that a selected list of species with known high conservation concern and currently receiving significantly less than recommended conservation attention fell within the SGCN quartile.



Species Ranking Process: It took most of the rest of 2004 to assemble taxa ranking teams of species experts and have them evaluate almost 700 fish and wildlife species, invertebrates included. For anadromous salmonids, the groupings used for evaluation were genetic diversity units (GDUs) rather than species. A genetic diversity unit is a group of genetically similar stocks that is genetically distinct from other such groups within a species.

The taxa evaluation teams were comprised primarily of WDFW personnel, with several invited staff from the Department of Natural Resources' Natural Heritage Program, the Washington Department of Transportation and the Oregon Natural Heritage Program (the only beetle specialist we could find). They met as often as required to assimilate the ranking criteria and evaluate the species assigned to their taxa evaluation team. Many of the species evaluated for the SGCN list ranked high due to biological concerns such as threat and vulnerability; some were targeted because their recovery or conservation efforts were not considered to be adequately funded. Others were included because their life history or habitat relationships are poorly understood and need more research and/or management dollars directed to them. Only native animal species were considered in developing this list. No major wildlife taxon was excluded from consideration. Game and commercially harvested species were included if they met other ranking criteria, i.e., if they were on one of the source lists. There were many heated discussions among taxa team members about which species should be included or not included on the SGCN list. However, the final result is an SGCN list (see Appendices 1 and 2) that we feel not only meets the expectations of Congress, but also meets the current conservation and funding needs of Washington's native fish and wildlife resources.

The resulting Species of Conservation Concern (SGCN) list for Washington, along with rankings, habitat associations, ecoregion occurrences, management and recovery plans is attached as Appendices 1 and 2.

Species Conservation Tables: The Species of Greatest Conservation Need matrix, included as Appendices 1 and 2, includes all 600 species ranked by WDFW. In addition, a table showing information on status, distribution, life history, conservation problems, conservation strategies and monitoring activities for the SGCN is included as Chapter IV. Other enhanced matrices, which include information on status and trends, problems and actions, are included as Appendices 9 and 10.

A separate list of Species of Greatest Conservation Need was also included in each ecoregional chapter. These ecoregional species lists were not developed independently of the statewide effort, but are simply those SGCN species that are known to occur in each particular ecoregion. For each ecoregional habitat description, we also included a list of species commonly associated with that habitat, again only a subset of the ecoregional species list.



Salmon Recovery: The issue of how to treat salmon conservation and salmon recovery in the Washington CWCS was a topic of intense discussion since the beginning of the planning process. Washington's eleven species and subspecies of native salmonid fish not only have important biological, cultural, commercial and recreational value; salmon are important indicators of watershed health throughout the Pacific Northwest. More than two-thirds of WDFW's budget and staff are directly or indirectly devoted to salmon production, salmon recovery, and salmon harvest allocation. WDFW is also leading or heavily involved in the development and implementation of salmon recovery plans at many different levels, from individual watersheds to the international waters of the Pacific Ocean, Puget Sound/Georgia Basin, and the Columbia River system.

Because salmon are so important to the overall discussion of the state's fish and wildlife resources, it was decided to include them developing WDFW's Species of Greatest Conservation Need list. Although it made no sense to rank only eleven species, or to rank hundreds of salmon stocks and populations, it did work to rank salmon by GDU, and that is what senior fisheries biologists at WDFW did. A list of salmon GDUs included in Washington's Species of Greatest Conservation Need (SGCN) list is included as Appendix 2.

For most other discussion of salmon conservation and recovery, including statewide Habitats of Conservation of Concern, problems and strategies, it was decided to refer CWCS readers to various other salmon planning efforts and collaborative plans, a list of which is included as Appendix 7. A sense of balance was hopefully achieved between ignoring salmon, which would have been contrived, and discussing all aspects of salmon conservation, which could have overwhelmed all other discussion of species and habitat conservation in the CWCS.

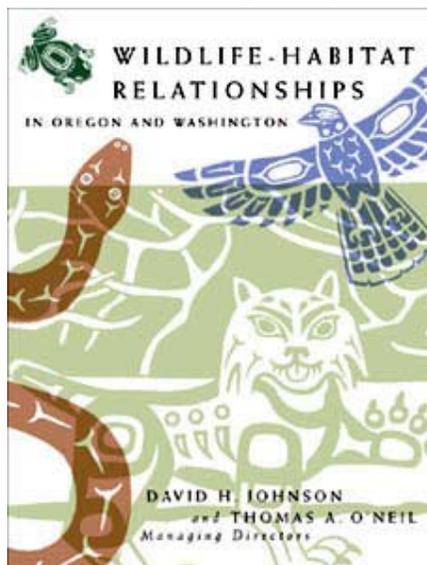
B. Identify Habitats of Conservation Concern

While the State Wildlife Grants program and the CWCS guidelines are essentially species-driven, much of the conservation effort that will be directed to identified Species of Greatest Conservation Need will be habitat-related, including habitat protection, restoration, and enhancement measures carried out by WDFW and its public and private conservation partners. The NAAT guidelines not only require that we identify wildlife habitat types and communities that are essential to the conservation of Species of Greatest Conservation Need, but that we provide information on the extent and condition of these habitats.

Unlike the evaluation and ranking of species, WDFW did not consider it necessary to design new criteria or do any original analysis to determine the associated habitats essential to the Species of Greatest Conservation Need. These species-habitat associations have been well established recently through two efforts, both involving and funded by WDFW and other conservation partners:

Wildlife-Habitat Relationships of Oregon and Washington (WHROW),

published by Oregon State University in 2001. The co-authors of this remarkable 736-page book (with accompanying appendices) are David H. Johnson, a wildlife biologist and WDFW employee at the time of publication, and Thomas A. O'Neil, a principle with the Northwest Habitat Institute. WHROW provided WDFW with an invaluable source of current information on species/habitat relationships. A primary emphasis of the book was to develop high-quality data sets on wildlife habitats and their associated species. This was achieved by defining, describing, and depicting various component details about wildlife habitats. This approach moves away from defining what is primary or secondary habitat for a species, and towards identifying the overall strength and context of the relationship between the wildlife species and their habitat(s). The strength of the relationship is designated as *Closely Associated*, *Generally Associated*, or *Present* within the wildlife habitat types or structural conditions. In addition, a confidence rating was assigned to the relationship and its strength, based on current knowledge. This approach allows for an individual species, as well as multiple species, to be assessed across habitats.



Using the data sets provided by WHROW and the Interactive Biological Information System (IBIS), described below, we were able to develop our SGCN master list and cross-reference species relationships across all defined habitats across the state. Using this data, we were then able to compare the frequency of close and general associations between Species of Greatest Conservation Need and WHROW habitats and select CWCS priority habitats based on SGCN dependence on those habitats.

Statewide and ecoregional habitat maps included in the CWCS are based on WHROW habitat source data.

Tom O'Neil and the Northwest Habitat Institute developed the Interactive Biological Information System (IBIS), an informational resource developed to promote the conservation of Northwest fish, wildlife, and their habitats through education and the distribution of timely, peer-reviewed scientific data. IBIS contains extensive information about Pacific Northwest fish, wildlife, and their habitats, and attempts to reveal and analyze the relationships among these species and their habitats. IBIS is described in more detail in Chapter III, State Overview.

A copy of *Wildlife-Habitat Relationships of Oregon and Washington (WHROW)* is included with the Washington CWCS as Appendix 13. For more information on data collection and analysis techniques used in WHROW data sets, go to:

<http://www.nwhi.org/ibis/home/ibis.asp>

Ecoregional Assessments (EA) (described in Appendix 12): To complete the Ecoregional Assessments for Washington, expert technical teams collaborate on a series of analyses based on methods developed by The Nature Conservancy, NatureServe and other conservation organizations. These technical teams analyze terrestrial and aquatic plants, animals and ecological systems.

Each EA technical team begins their analysis by selecting the species, communities and ecological systems that would serve as the conservation targets, i.e., the elements of biodiversity that should be included in priority conservation areas. This results in the selection of terrestrial species targets, aquatic species targets, rare plant community types, and coarse filter system targets. These system targets are the major habitat types that make up the terrestrial and aquatic environments for each ecoregion. They are used as targets based on the hypothesis that by ensuring their full representation in the portfolio, the majority of species in each ecoregion—including the vast number of poorly studied or unknown species—will also be included. In this way the coarse filter system targets serve as a substitute or surrogate for common species and species with inadequate data.

For each of these targets, all available records of location and status in the ecoregion are gathered and reviewed. Goals are then set for each target to serve as instructions or benchmarks for the identification of the portfolio of priority conservation areas. These goals describe how many populations (for species targets) or how much area (for system targets) the portfolio should include to represent each target, and how those target occurrences should be distributed across the ecoregion to ensure good representation of genetic diversity and hedge against local extirpations. More details of the development of ecoregional assessments are included in Appendix 12.

The Washington Natural Heritage Program provided a crosswalk comparison of habitat classification systems developed by WHROW, NatureServe, and WDFW's Priority Habitats and Species. This crosswalk is included as Appendix 14.

Statewide and Ecoregional Habitats of Conservation Concern: The master SGCN ranking matrix (Appendices 1 and 2) shows associated WHROW habitats for each species ranked for the statewide SGCN list. A list and description of priority WHROW habitats selected by the CWCS is also attached as Appendix 8. For purposes of reference only, Appendix 14 cross-references WHROW habitat classifications with WDFW PHS Habitats and NatureServe's Ecological System-based Land Cover Types for clarification. Habitat descriptions and evaluations included in the list of statewide Habitats of Conservation Concern were reviewed for accuracy by respected scientists within and outside the WDFW, including members of the Washington Natural Heritage Program. Chapter III, State Overview of the Washington CWCS also includes a table that groups all 29 of the WHROW wildlife habitats that occur in Washington into three priority groupings, Priority One, Priority Two, and Other. These statewide priority groupings were made by simply associating the wildlife species on the SGCN list with their associated habitats, as determined by WHROW. These habitat priorities were reviewed by WDFW managers and are compatible with other systems and lists of priority habitats employed by WDFW, including the existing PHS system.

Each of the ecoregional chapters in the Washington CWCS includes a list of those WHROW wildlife habitats found in that ecoregion titled Ecoregional Habitat Overview, as well as those habitats, which are considered to be a management priority for that ecoregion. As with the statewide list of priority habitats, ecoregional priority habitats

were determined by deciding which habitats were most closely associated with species on the SGCN list found in that ecoregion.

In the future, the Washington CWCS's habitat classification and maps will be updated using "ecological systems." This will make the CWCS consistent with the USGS National Land Use/Land Cover mapping that is currently in progress. This coarse-filter classification is being adopted by all federal agencies and by NatureServe for regional conservation planning.

C. Identify Major Problems and Conservation Strategies for Species and Habitats

Guiding Principle 2: "Build a plan of plans." Construct the Washington CWCS from a large body of existing work, including nine ongoing ecoregional assessments.

The Washington Department of Fish and Wildlife experiences most of the same problems, threats and opportunities related to fish and wildlife conservation as other state wildlife agencies in the United States. Although the diversity of species and habitats may be greater than in many other states, the range of opportunities and possible actions available to WDFW and its conservation partners is similar to those available in other states. Fish and wildlife conservation in Washington—and other states, for that matter—is limited only by the laws in place to protect wildlife and habitat, the extent to which the public and decision makers will enforce these laws, and the funding available for conservation.

Statewide Problems and Conservation Strategies: In developing the CWCS for Washington, many other plans and assessments were reviewed and summarized. Some of these plans are described in Chapter III, State Overview. A narrative discussion of major statewide conservation problems and issues is also included in Chapter III, State Overview. WDFW did not attempt to prioritize the statewide problems and conservation strategies discussed in Chapters III. All of the major conservation problems discussed in Chapter III are serious problems, although their relative importance may vary from ecoregion to ecoregion. Subsequent to the release of the draft CWCS in June 2005, additional matrices were developed to provide more information on the life history, population status, distribution, problems, strategies and recommended conservation actions for each of the roughly 200 fish and wildlife species included on the SGCN list. These new matrices are discussed below.

Ecoregional Problems and Conservation Actions: Each ecoregional chapter of the Washington CWCS includes a list of Ecoregional Conservation Partnerships, as well as Major Plans and Assessments reviewed and used to develop each ecoregional discussion. Each chapter also includes a discussion of identified problems, as well as conservation actions that will be pursued in each ecoregion to address these problems. Many of these problems and conservation actions were extracted or synthesized from other plans. For the purposes of ensuring that the full range of conservation problems and threats were considered, WDFW staff consulted *Conventions for Defining, Naming, Measuring, Combining and Mapping Threats in Conservation, Draft 1* (Salafsky et al., December 2003).

Much of the staff work spent on developing these ecoregional chapters was completed after the draft CWCS was released in June 2005. The discussion of ecoregional conservation actions for wildlife species and associated habitats was expanded in scope and detail for the final CWCS.

Species Conservation Matrices: Conservation problems and corresponding strategies and actions are often interconnected at a range of levels. Whether a certain condition has an impact on an ecosystem, a habitat or a species, all three may be affected in some way. Adequately addressing problems at larger scales can have beneficial indirect effects at finer scales, and it is important to consider each individual species and the unique problems that affect the abundance and vitality of each.

Therefore, we created a set of matrices to detail each SGCN species' life history, status, distribution, general and specific problems, and conservation actions. Expanded text matrices for each taxon are included in Chapter IV, Species of Greatest Conservation Need, and a problems/actions checklist matrix that summarizes this information is attached as Appendix 10. In this way, each species may be targeted for specific actions, and cross references may group suites of species that are adversely affected by the same problems and which would benefit from the same conservation actions. Each of these matrices summarizes important conservation problems and actions for all Species of Greatest Conservation Need.

Species information, conservation problems and actions were refined from a variety of sources including ecoregional assessments, subbasin plans, management and recovery plans, status reports, current peer-reviewed literature, and expert opinion.

D. Provide for Periodic Monitoring of Species, Habitats and Conservation Actions

Monitoring is a key element in managing WDFW's fish, wildlife and habitat conservation programs, but WDFW's monitoring activities had never been pulled together and described in one place before. In 2005, WDFW Director Jeff Koenings appointed one of his senior policy staff as WDFW's new Monitoring Coordinator and asked her to develop a report that would summarize current and proposed monitoring activities for Washington's CWCS. She met with managers from the Fish, Wildlife and Habitat Programs on a number of occasions to ensure that key monitoring programs were included in the summary, and to design some future steps to monitor fish and wildlife species, associated habitats and biodiversity. The result of this internal coordination effort is described in Chapter VII, Monitoring and Adaptive Management.



E. Provide for the Periodic Review and Revision of the CWCS

Development of the CWCS is perhaps the largest and most complex conservation planning effort undertaken by WDFW since the agency's creation in 1994 (by merger of separate Departments of Wildlife and Fisheries). It was a huge effort for a relatively new agency without a history of comprehensive planning. Developing a

new Species of Greatest Conservation Need list alone was a protracted and often painful process, but was worth the effort because it narrowed the field of species eligible for new funding from thousands to less than 200, including many invertebrates and other less well-known animals that were never before considered.

WDFW went into the CWCS process committed to developing the best comprehensive wildlife strategy it could produce in the less than two years allocated to the process. WDFW is equally committed to following through on the various strategic recommendations in the CWCS by reviewing these recommendations on a regular basis, revising the species and habitat priorities when necessary and appropriate, and adopting or developing fair and rational approaches to allocating responsibilities and funding for implementation, both within WDFW and among its various public and private conservation partners. The subject of CWCS review and revision is discussed in more detail in Chapter VII, Monitoring and Adaptive Management.

F. Coordinate Development of the CWCS with Federal, State, Local and Tribal Partners

The Washington Department of Fish and Wildlife has emphasized coordination with many public and private conservation partners in the development of its CWCS, with a strong emphasis on those partners who have a primary interest or statutory responsibility for fish and wildlife conservation. Both elements of coordination and public involvement have been addressed in an Outreach Plan discussed later in this chapter. CWCS coordination was accomplished at three different scales:

National: WDFW staff have worked closely with the U.S. Fish and Wildlife Service and the International Association of Fish and Wildlife Agencies (IAFWA) during all phases of the CWCS process. We have participated in national CWCS conferences in Burnet, Texas and Nebraska City, Nebraska in 2004; our Director gave a keynote talk at the Nebraska conference.

Regional: Throughout the CWCS development process, WDFW staff have met on a regular basis with Federal Aid staff at the U.S. Fish and Wildlife Service, Region One in Portland, Oregon. WDFW has participated in regular conference calls with the Development Assistance Team (DAT) representative from Region One, as well as other western state fish and wildlife agencies. Early in the process WDFW also took the lead in setting up coordination meetings with CWCS coordinators from Oregon and Idaho, as well as Northwest representatives from Defenders of Wildlife and The Nature Conservancy. These meetings were held at the WDFW regional office in Vancouver, Washington, until everyone got too busy with CWCS production to meet on a regular basis.

Statewide: WDFW staff coordinated the development of the Washington CWCS with a wide range of internal and external organizations, including our own management program staff in Olympia headquarters, our field staff in six administrative regions around the state, and other state, federal and tribal wildlife agencies. Teams of technical experts were convened as necessary to develop our Species of Greatest Conservation Need list and associated habitats; these teams were comprised mostly of headquarters staff from Olympia. Meetings were held in all WDFW regional offices to involve regional staff in development of the nine ecoregional chapters of the CWCS. WDFW also closely coordinated the development of its CWCS with the Washington Natural Heritage Program of the Department of Natural Resources, as well as staff from The Nature Conservancy of Washington,

Defenders of Wildlife and Audubon Washington. Much of this coordination took place around certain issues on an ad hoc basis.

G. Incorporate Opportunities for Public Involvement into Development of the CWCS

One of the first tasks undertaken by WDFW in the CWCS process was the development of an Outreach Plan in late 2003. This plan built upon the outreach efforts of other plans such as the subbasin plans and ecoregional assessments, which all have their own public involvement and agency coordination elements. The CWCS Outreach Plan addresses the interagency coordination requirements of both Essential Element 6 and the Public Involvement requirement of Essential Element 7. Although review opportunities were provided for the general public in the draft CWCS review process, primary outreach attention was given to those agencies, organizations and stakeholder groups most affected by the strategies outlined in Washington's CWCS. The Outreach Plan also addresses WDFW's various internal publics, ranging from the Fish and Wildlife Commission and Department staff to various standing advisory committees to the Director.



The CWCS Outreach Plan, included as Appendix 4, outlines the following three phases or points of contact with agencies, NGOs and the public:

Initial Outreach: From November 2003 through June 2005 we met with existing WDFW advisory councils, an appointed CWCS Advisory Committee, federal and state agencies, Washington Indian tribes, the Governor's Office, key legislators and the Washington State Association of Counties on many occasions. At these briefings we provided an overview of the CWCS process and indicated that once we developed a draft CWCS document, we would provide opportunities to these same agencies and publics to comment on the draft and shape the future State Wildlife Grants (SWG) program for Washington.

We met with a wide range of agencies and organizations in our initial outreach phase; however, as indicated above, our main outreach focus was on agencies and organizations with special responsibilities for fish and wildlife conservation—our public and private conservation partners. See Appendix 15, Outreach Record. Treaty Indian tribes, for instance, have "co-management" status under federal treaties for managing and harvesting salmon, shellfish and some game animals. The Washington Department of Natural Resources and USDA Forest Service manage vast areas of public lands that provide habitat for Washington's fish and wildlife. The Washington Association of Counties and the Planning Association of Washington represent local elected officials and county planners responsible for implementing Washington's Growth Management Act, which is the most comprehensive state law addressing the protection of habitat and other identified "critical areas." Many of our conservation partners are listed in Appendix 5.

Special outreach efforts were directed toward conservation partners such as The Nature Conservancy, Audubon Washington and Defenders of Wildlife, as well as

private timber and agriculture groups, which are heavily regulated and have a direct influence on Washington's rural landscape. Our initial outreach message was intended to secure interest and involvement in the CWCS process, but we also wanted to assure industry groups such as the Washington Farm Bureau and the Washington Forest Protection Association (timber industry lobby) that WDFW does not see the State Wildlife Grants program and CWCS requirements as a venue for justifying or recommending new regulatory programs.

A CWCS Advisory Committee was appointed by the Director of Fish and Wildlife in early 2004 and met periodically as a committee throughout the development of the CWCS. At each meeting we updated the committee on the process of Washington's CWCS and asked for their feedback on our approach. The committee included professionals experienced in their respective industries and fields. They provided honest, constructive feedback and served as a valuable sounding board for development of the CWCS. Members of the CWCS Advisory Committee are listed in Appendix 11.

Draft Strategy Review: Our original outreach plan called for two rounds of review for the draft CWCS; the first in March or April 2005 for our internal publics, the second in May and June 2005 for our external publics, including other conservation agencies. Because the production schedule for the draft CWCS took longer than expected and, in order to meet our August deadline for submittal to the NAAT, we combined both external and internal publics into one review period.

On June 1, 2005 WDFW sent out a statewide press release announcing that the draft CWCS would be posted on WDFW's website and that we would sponsor a series of six public meetings around the state in June. This press release is included as Appendix 16. On June 7, 2005 a first draft of the Washington CWCS was posted on WDFW's website at: www.wdfw.wa.gov/wlm/cwcs, and we immediately began conducting public meetings at our regional offices in Yakima, Spokane, Ephrata, Vancouver and Montesano. We also had a meeting with the CWCS Advisory Committee on June 9 in Olympia to brief them on the draft.

The public meetings were successful in giving interested publics an opportunity to review and ask questions about the draft CWCS, including draft ecoregional chapters, by having headquarters and regional staff walk through a copy of the draft projected on a large screen. The best-attended meetings were in Ephrata and Vancouver; the lowest attendance was in Montesano and Spokane, with one and two attendees each, respectively. When the public meetings were concluded, we scheduled follow-up meetings with major conservation partners, including the Washington Department of Natural Resources, U.S. Fish and Wildlife Service, and the USDA Forest Service.

The public was asked to provide comments on the draft CWCS to WDFW by June 30, 2005; this deadline was later extended to July 8 for the CWCS Advisory Committee and state and federal conservation agencies. Some conservation partners, such as The Nature Conservancy and Defenders of Wildlife, met our short review deadline; other review comments, mostly from state and federal agencies, trickled into WDFW through the week of July 25, 2005. Written comments on the draft CWCS were received from a number of interested individuals, advisory committee members, and the following conservation partners:

Defenders of Wildlife
The Nature Conservancy
U.S. Army, Yakima Training Center

U.S. Fish and Wildlife Service
USDA Forest Service
Washington Biodiversity Council
Washington Department of Natural Resources
Washington Farm Bureau
Washington Forest Protection Association

Post-submittal Outreach and Publicity: Once the final CWCS has been submitted to the NAAT and approved, WDFW will initiate a third round of outreach to the outdoor media and the public. The focus of this effort will be on the final CWCS and how it guides the future course of wildlife conservation in Washington. We will refer people to the web-based version of the CWCS, which will include many “hot links” to other websites and material referenced in the CWCS. We will also develop an Executive Summary of the Washington CWCS in the fall of 2005 and use it in this last phase of our outreach. The executive summary will be a full-color brochure, approximately 8 to 12 pages in length, and should be helpful in briefing elected officials, the media, and other publics that did not have the time or interest to read the entire CWCS. We hope to put copies of the executive summary in the hands of elected officials and others who can help us address the various problems and issues identified in the CWCS.

Outreach Record: Our outreach contacts from late 2003 through August 2005 are documented in an Outreach Record, included as Appendix 16.

Outreach Materials: A number of outreach tools were developed by WDFW prior to publicizing the CWCS process. These include the CWCS website at www.wdfw.wa.gov/wlm/cwcs, a number of CWCS PowerPoint slideshows tailored to fit different audiences, and two color brochures: one describes the Washington CWCS, and the other illustrates the interactive relationships between the CWCS and other planning efforts at different scales (Appendices 17 and 18).

