

STATEWIDE HABITAT PLAN

2025



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ACKNOWLEDGMENT

Many throughout the Wyoming Game and Fish Department participated in the effort to update the Statewide Habitat Plan. Members of the Habitat and Technical Advisory Group provided direction and leadership, and included Paul Dey, Aquatic Habitat Manager, Ian Tator, Terrestrial Habitat Manager and Brian Parker, Habitat and Access Branch Chief. Many thanks to Jim Wasseen, Wyoming Landscape Conservation Initiative Coordinator, for his diligence in completing much of the revisions, setting agendas and general good cheer. GIS Analyst Jami Brislan worked with aquatic, terrestrial and habitat and access biologists updating priority areas and completed revisions to the virtual story map. Layout and design was completed by Media Marketing Specialist, Emalee Smith. Finally, and most importantly, this plan is a result of all the biologists and staff who contributed ideas, opinions and questions.



Acronym	Name
Aquatic Habitat Biologist	AHAB
Beaver Restoration Assessment Tool	BRAT
Bureau of Land Management	BLM
Bureau of Reclamation	BOR
Crucial Habitat Assessment Tool	CHAT
Geographic Information Systems	GIS
Habitat and Access	H&A
Habitat Policy Group	HPG
Habitat Protection Program	HPP
Habitat Technical Advisory Group	HTAG
Hydrologic Unit Code	HUC
Integrated Resource Management Application	IRMA
Memorandum of Agreement	MOA
National Environmental Policy Act	NEPA
Non-Government Organization	NGO
National Hydrography Dataset	NHD
National Park Service	NPS
Natural Resources Conservation Service	NRCS
Pinedale Anticline Project Office	PAPO
Public Access Area	PAA
Resource Management Plan	RMP
Regional Leadership Team	RLT
Species of Greatest Conservation Need	SGCN
State Engineers Office	SEO
Statewide Habitat Plan	SHP
Terrestrial Habitat Biologists	THAB
U.S. Forest Service	USFS
U.S. Fish and Wildlife Service	USFWS
University of Wyoming	UW
Wildlife Environmental Review	WER
Wildlife Habitat Management Areas	WHMAs
Wildlife Management Area	WMA
Wyoming Department of Transportation	WYDOT
Wyoming Game and Fish Commission	WGFC
Wyoming Game and Fish Department	WGFD
Wyoming Geographic Information Science Center	WyGISC
Wyoming Habitat Assessment Methodology	WHAM
Wyoming Interagency Spatial Database & Online Management	WISDOM
Wyoming Landscape Conservation Initiative	WLCI
Wyoming Water Development Commission	WWDC
Wyoming Water Development Office	WWDO
Wyoming Wildlife and Natural Resources Trust Fund	WWNRT



BACKGROUND

This Statewide Habitat Plan defines how the Wyoming Game and Fish Department will meet its mission of Conserving Wildlife — Serving People by working with external partners to conserve and improve habitat. Within the WGFD, the SHP provides a single, unified roadmap defining how several Director's Office, Fish, Services and Wildlife division programs, with complementary and sometimes overlapping responsibilities, work together to accomplish habitat protection and enhancement goals.

The WGFD's first Strategic Habitat Plan was completed and approved by the Wyoming Game and Fish Commission in 2001, and revised and updated in 2009, 2015 and 2020. This current update reflects additional information on wildlife and fish populations, distributions and habitat. In particular, updates reflect activities under the WGFD's current Strategic Plan. Updates also reflect actions from the State Wildlife Action Plan which itself was updated in 2025. Title 23, the legislation that established the Wyoming Game and Fish Commission, states the Commission was created to "provide an adequate and flexible system for control, propagation, management, protection and regulation of all Wyoming wildlife" (23-1-103). The management of wildlife is inseparable from the habitat that sustains it. The WGFD's ability to sustain quality wildlife habitat, and therefore wildlife, is contingent upon working in partnership with private landowners and public land managers, conservation organizations, local, state and federal governmental agencies and the public. These partnerships are key to implementing the SHP and maintaining abundant wildlife now and into the future. Maintaining habitat values and addressing key habitat issues will require careful consideration, collaboration and planning followed by bold action under this plan.

The purpose of this Statewide Habitat Plan update is to:

1. Provide current guidance on prioritizing the WGFD's habitat actions and areas.
2. Identify habitat goals, strategies and actions for 2026-30.
3. Identify how proposed habitat projects will be reviewed and ranked for funding from the Wyoming Game and Fish Wildlife Trust Fund and other funding sources.
4. Clarify how the SHP relates to other planning efforts.
5. Identify how various WGFD sections and personnel work together to accomplish habitat goals.



HABITAT MISSION



Promote and maintain the availability of high-quality habitat to sustain and enhance future wildlife populations.



HABITAT VISION

The Wyoming Game and Fish Department is the steward of all Wyoming's wildlife, dedicated to the conservation of sustainable, functional ecosystems capable of supporting wildlife populations at least as healthy, abundant and diverse as they were at the dawn of the 21st century. The WGFD will promote a holistic approach to habitat management, integrating management and various land uses through collaborative efforts with the public, conservation partners, private landowners and land management agencies. The WGFD will increase public awareness of the need to manage for quality wildlife habitat today to help ensure future healthy and abundant wildlife populations. Wyoming Game and Fish Commission lands will be managed to emphasize and maintain the wildlife habitat and public access values for which they were obtained.

STATEWIDE HABITAT PLAN GOALS

1

Conserve and protect crucial aquatic and terrestrial wildlife habitats.

2

Restore aquatic and terrestrial wildlife habitats.

3

Conserve, enhance and protect fish and wildlife migrations.



WGFD HABITAT FUNCTIONS AND ORGANIZATION

The responsibility for implementing habitat work across the WGFD is distributed among several programs across all WGFD Divisions (Figure 1). The Aquatic Habitat, Habitat Protection Bioservices, Terrestrial Habitat and Habitat and Access sections have primary and direct responsibility. The Director's Office provides policy-level support by implementing the policies and decisions of the WGFC regarding wildlife and wildlife habitat management, including scientific data collection, research and habitat conservation and enhancement. The Communications and Education Division oversees the communication of habitat information and publications related to all WGFD activities including habitat work.

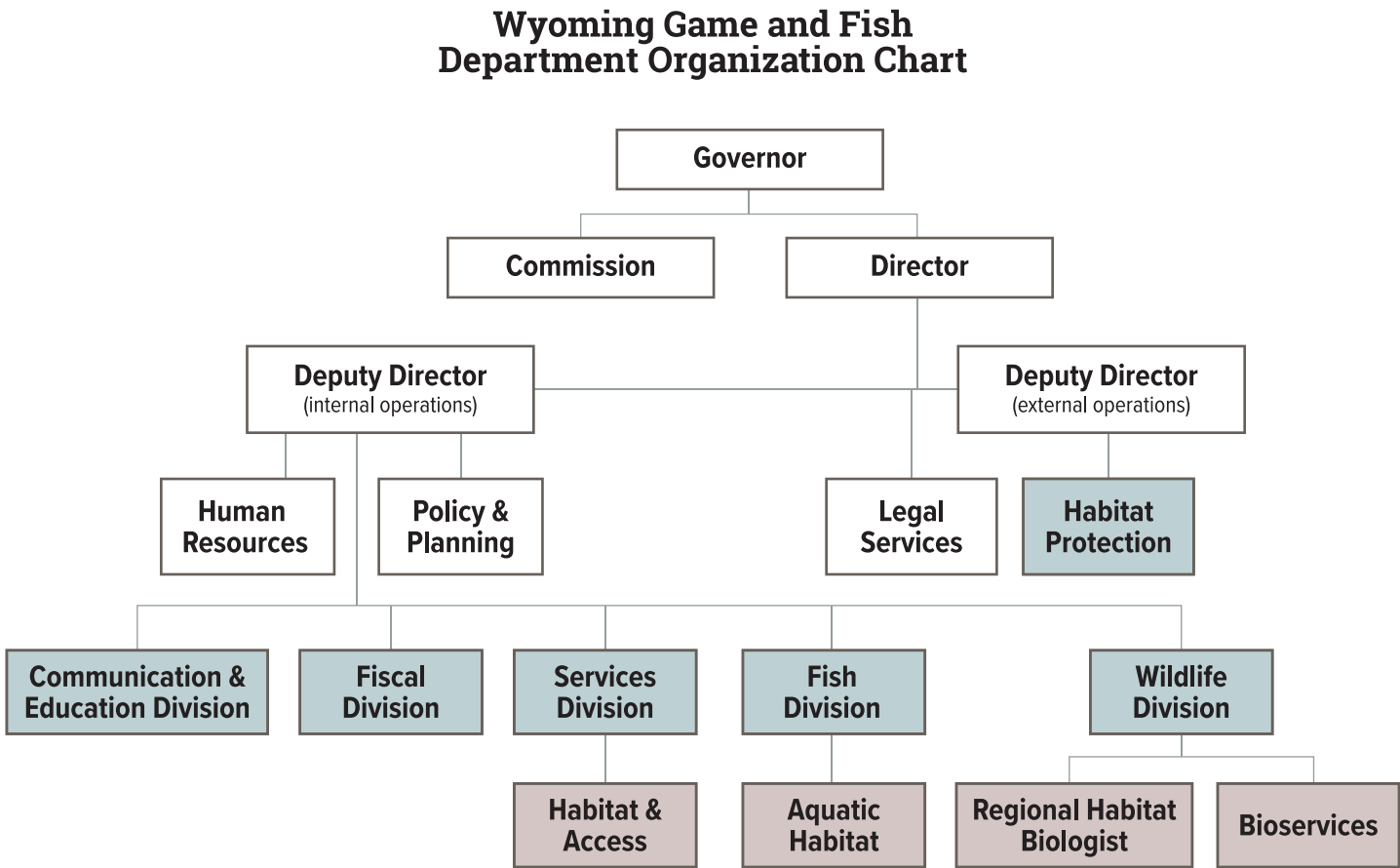


Figure 1. WGFD work units with primarily habitat responsibilities.

The Habitat Protection Program, under the Director's Office (Figure 1), coordinates WGFD review and evaluation of land use plans, projects, policies and activities that affect fish, wildlife and their habitats, and makes recommendations consistent with WGFD and Commission policies, position statements and strategies. This section coordinates WGFD input for planning and implementation of human development activities, natural resource extraction, federal land use plans (Forest Plans, BLM Resource Management Plans and others) and individual local habitat and land management projects throughout the state. These plans and projects, in total, influence the amount, type and intensity of land use changes that occur in Wyoming. The SHP serves as one of several reference documents used as a basis for WGFD recommendations and negotiations to maximize benefits and minimize harms to crucial habitats.

The Fiscal Division oversees all financial operations of the WGFD, including budget development, financial reporting, accounts payable, purchasing, asset management, federal funds (grant) management, contract management, revenue collection and licensing.

The Services Division includes the Lands Administration Section, which monitors property rights for WGFC-owned and administered lands and identifies lands and/or property rights to acquire in order to restore and conserve habitat to enhance and sustain wildlife populations. Engineering and surveying staff assist on fish passage projects, habitat developments and many efforts on Commission held properties. The Habitat and Access Branch manages WGFC-owned and WGFD-managed lands, including Wildlife Habitat Management Areas and Public Access Areas, as well as implements habitat restoration and enhancement projects across Wyoming.



Habitat is fundamental to management efforts at all levels within the WGFD (Figure 1). Fish Division fishery managers, water management biologists and aquatic habitat biologists all have a stake in conserving and enhancing all aquatic wildlife, reptiles, amphibians and their habitats for current and future generations. Likewise, Wildlife Division programs at the state, regional or section levels are responsible for conserving and enhancing terrestrial wildlife and their habitats and include: bioservices, law enforcement, wildlife management coordinators, terrestrial habitat, wildlife biologists, Access Yes program staff, large carnivore section and the Pinedale habitat mitigation biologist among others. Information and education staff publicize a broad range of news and information including habitat-related stories.

Two WGFD committees were formed in 2006 to help address the complexity and far-reaching scope of habitat issues facing the WGFD. The Habitat Policy Group consists of the WGFD deputy director and assistant division chiefs and provides oversight of the Habitat and Technical Advisory Group, consisting of program managers. The HPG and HTAG, with input and assistance from regional WGFD personnel, are tasked with revising and updating the SHP to provide oversight and direction for all habitat issues within the WGFD.

STATEWIDE HABITAT PLAN REVISION

This revision aligns the Statewide Habitat Plan with the WGFD's Strategic Plan (Figure 2, <https://wgfd.wyo.gov/about-us/strategic-plan>), which was finalized in 2019 and provides direction to ensure a sustainable future for fish and wildlife. The three SHP goals serve to implement the overall Strategic Plan habitat goal (Figure 2).

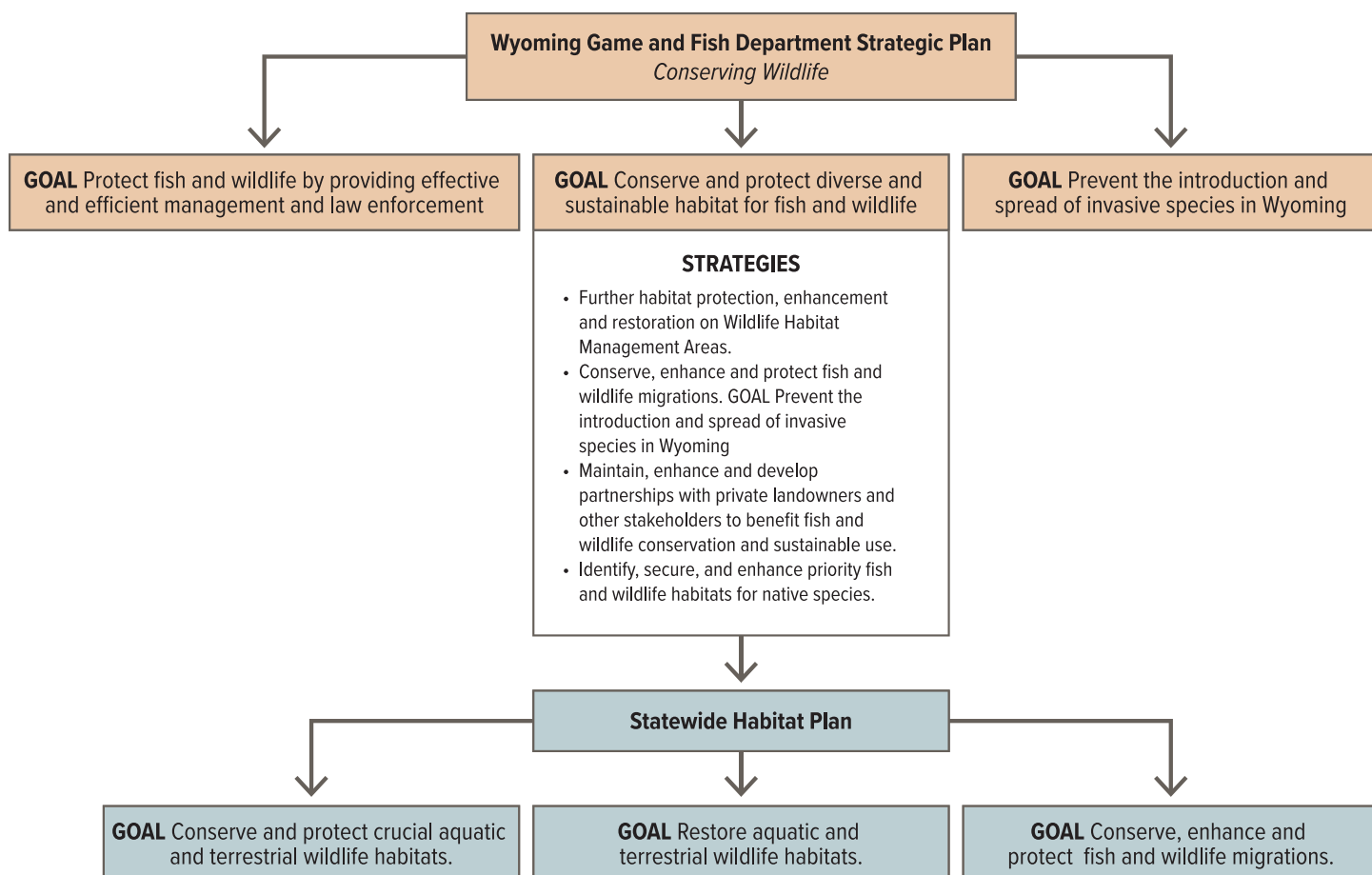


Figure 2. Aligning the 2020 Statewide Habitat Plan with the WGFD's Strategic Plan.



CRUCIAL, RESTORATION AND CONNECTIVITY PRIORITY AREAS

Department habitat plans have consistently featured geographic priority areas since the first plan was written in 2001. Identifying priority areas serves at least eight functions (Table 1).

Table 1. How Priority Areas Are Used

Priority Area Use	Crucial Areas	Restoration Areas	Connectivity Areas
Indicate department support of efforts by other agencies, groups and individuals.	X	X	X
Inform the public and specific partners about areas that are especially important to the WGFD's efforts to deal with connectivity limitations. GIS layers will be provided for IRMA, WISDOM, NREX, etc. to indicate areas of high wildlife value so others can properly evaluate and assess these sites.	X	X	X
Rank and prioritize habitat proposals by WGFD personnel for funding decisions.	X	X	X
Develop comments and/or recommendations on other agencies' plans.	X	X	X
Evaluate properties for Commission actions including land acquisitions and conservation easements.	X		X
Identify potential impacts of human activity and development proposals to important crucial and connectivity resources.	X		X
Develop annual work plans.		X	X
Illustrate to the public and our partners those areas the WGFD will focus habitat restoration and connectivity efforts for the next 5 years.		X	X

Revision of priority areas under this SHP took place in an online environment using ArcGIS with final areas displayed in an ESRI Storymap. Using existing, vetted Geographic Information System (GIS) data layers to develop priority areas created a uniform approach across the state that allows updating in a nimble fashion, while retaining local knowledge and flexibility to drive priorities.

The development of the 2025 SHP priority areas involved regional biologists reviewing various reference data layers such as big game ranges, migration corridors, greater sage-grouse core areas, aquatic conservation areas, habitat intactness data and more. They were asked to compare the 2024 priority area layers to the reference layers to decide if GIS layers need to be added or edited to capture any changes or updates within the various priority area types. See Appendix 2 for a detailed description of each priority area type and further detail about the priority area update process.

Priority areas were not identified in Yellowstone National Park or the Wind River Indian Reservation where the WGFD does not have wildlife management authority. The one exception is the inclusion of greater sage-grouse core areas within the Wind River Reservation. Under the SHP, there is a fundamental distinction made between wildlife habitats that are "crucial" for wildlife and those habitats that have been degraded and have potential for "restoration." This distinction between crucial and restoration areas is captured in Goals 1 and 2. Key wildlife habitat areas are delineated as crucial under Goal 1 to communicate their value to WGFD partners and public constituents. Likewise, by identifying restoration areas under Goal 2, the WGFD is signaling its intent to focus resources on issues that indicate the highest likelihood of success and most meaningful effect on habitat. Understanding the distinctions between Goal 1 and Goal 2 are vital for understanding the SHP and are discussed in more detail below.

Priority habitats delineated under **Goal 1, Crucial Habitat Areas**, are designated as crucial to conserving and maintaining populations of terrestrial and aquatic wildlife for the present and future. Successful, holistic habitat management will require a strong conservation component and partnership with private landowners, land management agencies, land users and conservation organizations. Crucial Habitat Areas are based on significant biological and ecological values including habitats that support important life stages needed for maintaining game species, SGCN and nongame species, or related vegetation communities. These include well-functioning habitats that need to be maintained as well as habitats that have deteriorated and should be restored or enhanced. The key consideration in selecting these areas was the identification and use of "habitat values." There are a variety of values used to identify crucial habitats including: big game seasonal ranges, greater sage-grouse core, SGCN presence and diversity, ecological condition of riparian and upland vegetation communities, movement and migration corridors (bottlenecks, routes, stopovers, high-use areas) of aquatic and terrestrial species, presence of cutthroat trout populations, watershed hydrologic function, stream flow, connectivity and physical access by aquatic and terrestrial wildlife populations to all habitats necessary to persist.



Goal 1 includes places where natural disturbance regimes continue to sustain the long-term health and diversity of vegetation.

Goal 2, Restoration Habitat Areas, are important aquatic and/or terrestrial wildlife habitats that can and should be actively restored to achieve greater wildlife value. These areas are primarily focused on aspen communities and other vegetative communities in advanced stages of succession, coniferous forests at risk due to beetle kill, fragmented and disconnected aquatic and terrestrial habitats, incompatible grazing management practices, aquatic habitats exhibiting decreased water quality and quantity, stream diversions that entrain fish, unstable stream channels (degradation, aggradation, lateral migration), shrub communities and all habitats with invasive plant species. Other important considerations when identifying habitats for restoration include: the probability of treatment success, the current status of the wildlife species present, managing the impacts that caused the habitat loss or degradation, providing or improving recreational access to high-quality habitats, and the opportunity to partner with others to increase likelihood of successful restoration and long-term management. Habitat restoration areas may overlap crucial habitat areas identified in Goal 1. Prioritization of these delineated areas will be important to properly allocate resources (e.g. manpower and money) and to properly communicate with management partners for project implementation including post-treatment management (Figure 3).

Goal 3, the connectivity goal, reflects the high-importance issues related to connectivity among fish and wildlife populations have gained in recent years. For example, In 2019, the WGFD, created a Statewide Migration Coordinator to deal with issues around ungulate migration and road crossings. Similarly, the WGFD created a Fish Passage Coordinator position in 2009. Goal 3 encapsulates the value of both protecting connectivity where it currently occurs and the issue of enhancing fish passage and wildlife migrations to improve connectivity.

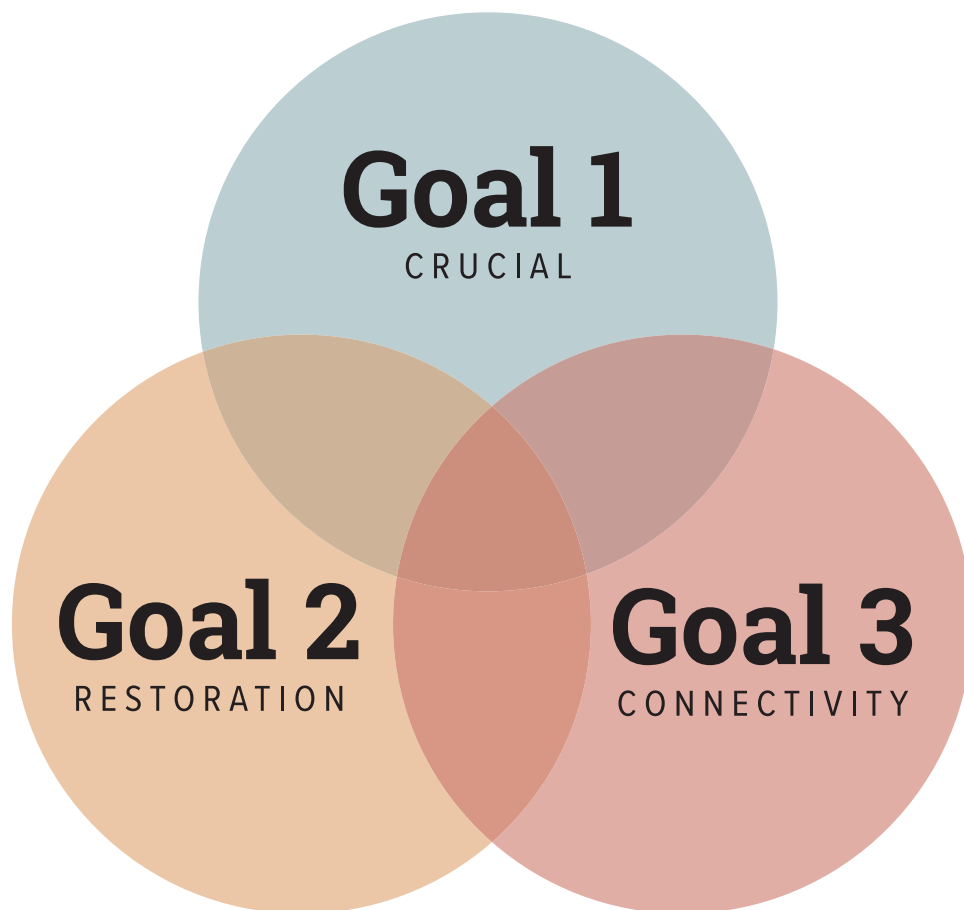


Figure 3. Relationships among Goals 1 through 3. The areas may commonly overlap as shown or may be distinct.

Officially designated and identified wildlife migration corridors, as well as migration routes delineated with GPS collars, are included under this goal. Likewise, fish passage areas are included. A sampling of issues addressed under this goal include road crossings that impede fish or wildlife, diversion dams that block fish, the location and accessibility of ungulate stopover areas, diversions that entrain high numbers of fish and fences that block or impede migrations.



FUTURE PRIORITY AREA REVISIONS

With the development of GIS-based priority areas, updates will be made annually. This will reflect the most current information and simplify 5-year updates. Annually in the fall, the HTAG chair will call for proposed changes to priority areas. Biologists will have the option of working with the GIS section to revise and update priority areas. Proposed changes to priority areas will be reviewed by the HTAG and final updated areas will be published by Jan. 31 each year. Updated GIS layers will be distributed to the WGFD staff and programs that use them in decision-making.

The occurrence of larger scale disturbances, such as wildfire, could affect any of the priority area designations. For example, focusing efforts on weed treatments and restorative actions in the seasons immediately following a wildfire are likely scenarios and would be sensible to re-evaluate restoration priority areas in such a case before the normal 5-year plan update in 2025.

WILDLIFE HABITAT MANAGEMENT AREAS

The WGFD manages 48 Wildlife Habitat Management Areas that comprise approximately 508,730 acres of deeded, leased and/or cooperative agreement land. These areas were purchased by the WGFC as an investment to protect crucial habitat for a variety of wildlife including fish, big game, waterfowl, upland birds, herpetofauna, non-game birds and mammals. The WHMAs include access to nearly 370 miles of streams, 2,000 acres of wetlands, and more than 47,000 lake-surface acres. During development of the WGFD Strategic Plan, WHMAs were identified as extremely important to Wyoming's citizens because of the opportunities they provide to hunt, fish, watch wildlife and recreate. The Strategic Plan's "Further habitat protection, enhancement and restoration on Wildlife Habitat Management Areas." strategy reflects the high priority of the WHMAs for the WGFD's efforts and funding.

Many of the WHMAs demonstrate conservation and protection of crucial aquatic or terrestrial wildlife habitats, consistent with Goal 1 of this habitat plan. For example, greater sage-grouse core areas and designated migration corridors can be found within a number of WHMAs. Many of the WHMAs were purchased to provide winter range for migrating big game. Some WHMAs provide crucial habitat for fisheries and are headwaters for many streams.

Habitat restoration on WHMAs demonstrates the efforts to improve and maintain the function of these highly-prized lands and water, or to address unanticipated impacts. Restoration efforts on WHMAs qualify for Statewide Habitat Plan funding under Goal 2, Restore Aquatic and Terrestrial Habitats.

WHMAs serve as connectivity areas for many populations of fish and wildlife, with many overlapping or in close proximity to ungulate migration corridors. These WGFC-owned lands provide winter range for elk, deer, pronghorn, bighorn sheep and moose; host important fisheries and provide stopover habitat for migrating birds and bats. These functions fall under Goal 3. Habitat Project Development and Funding.

HABITAT PROJECT DEVELOPMENT AND FUNDING

In 1986, the Commission recognized habitat as the single-most important factor contributing to the abundance and diversity of wildlife in Wyoming and established the Wildlife Trust Account. From interest generated by this trust, the WGFD has appropriated approximately \$500,000-\$1.2 million annually for internal habitat projects and information and education projects, as well as habitat funding for a variety of external entities.

WGFD is consulted regularly to partner on habitat projects and on prioritizing habitat work. A project ranking system helps allocate these funds to projects that will result in significant and long-term habitat conservation and management. A systematic project ranking approach ensures that project proponents are aware of how proposals will be evaluated and contributes to providing consistency and objectivity in the selection process. The approach below (Tables 2-4) will be used to assign ranks to proposed habitat projects.

Project development, submittal and evaluation occurs twice annually in January and August to accommodate the July 1 fiscal year and to align with the Sept. 1 Wyoming Wildlife and Natural Resource Trust application deadline.

The bulk of habitat projects will be:

1. Developed and submitted for review by late fall/early winter, reviewed and ranked by Regional Leadership Teams by early January.
2. Reviewed and ranked by the HTAG and HPG in January-February.
3. Presented in draft form to the Commission in March.
4. Finalized by July.

For proposals applying for \$400,000 or more of WWNRT funding or proposals that require funding before July 1 of the following fiscal year, applications will be reviewed and ranked in July and August. These timelines and review processes will occur for all habitat project proposals to ensure that, to the extent possible, projects are evaluated together and relative to one another and so that funding sources can be effectively leveraged. The HTAG chair will annually work with the budget team to set and publish due dates.



REGIONAL REVIEW

Each of the eight WGFD regions, through their RLT, is responsible for voting to establish the regional project ranking of the Habitat Trust Fund proposals. The voting subgroup of the RLT should include each project proponent and the regional fisheries, wildlife and habitat and access supervisors. Input should be sought from all interested regional employees. The RLT will provide ranked or prioritized project proposals along with explanations of significant discussion points pertaining to proposed projects (Table 2).

Table 2. Regional Leadership Team project ranking.

No. 1 project priority for the region	No. 2 project priority for the region	No. 3 project priority for the region	No. 4 project priority for the region	Additional projects
 5 points	 4 points	 3 points	 2 points	 1 point

The regional review process can be tailored to the unique needs, conditions and staffing that occur in the region. The following recommendations should assist RLTs and project proponents develop the highest quality projects and rankings:

- At RLT, All Region Meeting or other regional gatherings, share ideas for future projects. Early notice and vetting of ideas results in improved projects.
- Allow at least two weeks for review of applications or project proposal materials before they are due to HTAG.
- Distribute project proposal materials broadly to all interested regional employees and provide sufficient time for review before any meetings to discuss or rank.
- Conduct an in-person or video meeting where the project proponent can describe the project and address questions and concerns.
- Have the RLT chairperson facilitate the meeting, setting the agenda, distributing notes and products, etc.
- Strong projects evolve through time as good ideas and constraints are accommodated.
- Be a professional and expect the same of colleagues. Share project concerns and ideas in a constructive manner while avoiding personal attacks or overt criticism.
- Ask obvious questions. Sometimes the simplest question needs to be asked (Why are we doing this?).
- Share regional discussion points, concerns, pros/cons, etc. with managers and HTAG members.
- Consider regional priorities, be objective concerning where “your” project fits into the big picture and how high it should rank.

A regional review that incorporates the above principles will yield well-vetted projects. It is important reviewers consider several components of a project:

- Does the project proposal explain why the work is important? What is the problem? Is it compelling?
- Is the proposed approach technically sound?
- What is the cost/benefit ratio? Is the investment worth the likely outcome?
- What is the consequence of doing nothing?
- What is the long-term commitment for all potentially involved?
- Will ongoing maintenance be required and who will do it?
- Is the project an additional phase or step in an ongoing effort? If so, it may rate higher.
- Will the project garner buy-in with key landowners or partners?
- Are there, or will there be, appropriate funding and technical partners involved?
- Can the project be postponed or further developed while other ready projects take precedence?
- Does the project align with WGFD, SWAP and SHP priorities?
- Is the project seeking funding for activities that are otherwise difficult to fundraise? An example is project design.
- How time sensitive is the work? Would there be consequences for deferring implementation one year?



HABITAT TECHNICAL ADVISORY GROUP REVIEW

The HTAG will use a cumulative, 10-point scale to assign relative importance to habitat project proposals with the highest priority projects assigned higher numbered values (Table 3). The HTAG will assign values of 1 or 0 to those projects within a WHMA and address Goals 1-3. An additional point will be awarded if the project proposal explicitly identifies how it addresses one of the SHP climate change strategies or goals, or identifies how conditions will be more resilient to climate change and provide climate adaptation benefits to numerous species. An additional score of up to 5 points will be awarded by the HTAG based on various considerations including technical merit, cost effectiveness, project readiness, WGFD or programmatic priorities, demonstration value, and amount of partner contributions and engagement. Unique or special habitat types (e.g. bat hibernacula), novel approaches or comprehensive ecosystem benefits can be considered when awarding these additional points. This score will be combined with the regional priority score (Table 4).

Table 3. Project ranking system to be used by HTAG

Project	Points
In a WHMA and protects or improves habitat.	1 point ★
In a Crucial Area and addresses values (Goal 1).	1 point ★
In a Restoration Area and addresses issues (Goal 2).	1 point ★
In a Connectivity Area and protects or improves connectivity (Goal 3).	1 point ★
Addresses a climate change Strategy or Action or explicitly identifies how climate change resilience will be increased.	1 point ★
HTAG technical review.	5 points ★★★★★

Table 4. Examples of project ranking scores.

Region	In a WHMA	In a Crucial Area (Goal 1)	In a Restoration Area (Goal 2)	Addresses Connectivity Issues (Goal 3)	Addresses Climate Change	HTAG Review	Region Priority	Total Score
Project X	1	1	1	1	1	5	5	15
Project Y	0	1	1	0	0	3	2	7
Project Z	1	0	0	1	1	2	4	9
Project AA	0	0	1	1	0	4	2	8

Aquatic and terrestrial habitat statewide managers and the habitat and access chief will lead the HTAG in reviewing all regional and statewide project proposals and supplement regional rankings with rankings developed following Table 3 to provide a statewide prioritization. Additional means of evaluating proposals may be used to apportion limited funding. The HTAG chair will present HTAG funding recommendations to the budget team.

CLIMATE CHANGE

In 2012, a coalition including the Association of Fish and Wildlife Agencies, to which WGFD belongs, published the National Fish, Wildlife, and Plants Climate Adaptation Strategy. The strategy was designed to “inspire and enable natural resource managers, legislators and other decision makers to take effective steps towards climate change adaptation over the next 5-10 years.” In that spirit, climate adaptation actions were outlined in Wyoming’s 2017 State Wildlife Action Plan. In 2020, the HTAG sponsored a 3-day, virtual workshop providing WGFD staff an opportunity to learn about current climate change research and climate projections for Wyoming and to discuss the impacts of those changes for habitat management. This revision of the Statewide Habitat Plan continues to consider actions that would ameliorate the effects of climate change.

To begin to more explicitly consider the effects of climate change and climate vulnerability, this statewide habitat plan encourages biologists and managers to weave climate change considerations into habitat project proposals. Proposals that clearly identify how work will contribute to greater resilience and fishery or wildlife protection or improvement in the face of changing climate, will be ranked higher (Table 3).





GOALS STRATEGIES AND ACTIONS

The following outline highlights the goals, objectives and strategies to address the habitat values and issues facing Wyoming’s wildlife. This is a comprehensive and hierarchical list of activities that includes generic and specific actions.



Actions and strategies believed to be especially important to address climate change vulnerabilities and build resilience in fisheries and wildlife habitat are preceded with a fire symbol.

PROGRAM



Aquatic
Habitat



Terrestrial
Habitat



Habitat and
Access



Habitat Protection
Program



Fish and Wildlife
Migration

GOAL 1. CONSERVE AND PROTECT CRUCIAL AQUATIC AND TERRESTRIAL WILDLIFE HABITATS



Strategy I) Pursue conservation easements and other land stewardship agreements to conserve migration corridors, functioning diverse ecosystems, open spaces and other crucial habitats.

Lands, habitat and regional staff will coordinate agency efforts to collaborate with land trusts, conservation groups, landowners and other partners to pursue and create opportunities. Lands staff will actively monitor and manage existing easements and agreements.



Strategy II) Provide professional habitat input into land management permitting, planning and review processes (e.g., Resource Management Plans, Forest Plans, Environmental Impact Statements, Allotment Management Plans and Wildlife Environmental Reviews).

Habitat Protection Program staff will continue to lead and coordinate WGFD habitat commenting and input on land management planning and permitting. HPP will maintain the Wyoming Interagency Spatial Database & Online Management web application to provide current wildlife and wildlife habitat data to the Governor’s Office, State and Federal land management agencies, the U.S. Fish and Wildlife Service and other partners.

The following new or specific actions will be pursued or emphasized:

Action a) HPP will work with Wyoming Geographic Information Science Center to update the WISDOM application, annually, to enhance functionality for wildlife environmental reviews.





Strategy III) Minimize impacts of natural resource extraction and other human actions on wildlife habitat.

HPP staff will continue to provide input and actively participate in land management and project planning, process review, environmental commenting efforts and decision records as directed by the WGFC Mitigation Policy. Staff will work with the Governor's Office and as a cooperating agency to actively integrate sustainable aquatic and wildlife habitat components into land management planning documents. Staff will use the WGFD's WISDOM web application to facilitate project review and commenting. HPP staff will maintain up-to-date standardized comments and recommendations (e.g., fencing specifications, impact minimization recommendations for renewable and non-renewable energy development, pipeline stream crossing recommendations); provide them to land management agencies, other decision makers and project proponents; and use them in WGFD reviews of projects, where applicable.

The following new or specific actions will be pursued or emphasized:

Action a) Renewable energy recommendations were completed in 2021 and HPP will be updating an appendix to address new challenges and revise old recommendations.

Action b) Work with permitting entities and project proponents to understand when and how WGFD recommendations are implemented, and to maximize their effectiveness.

Action c) Update existing recommendations documents, including big game seasonal range updates, and potentially develop new guidance documents in coordination with WGFD staff based on new science and policies pertaining to fish, wildlife, habitat and recreation impacts habitat.

Action d) Integrate the Habitat Intactness map layer into Wisdom and NREX and use it when commenting in the Wildlife Environmental Review process.

Action e) Update the WGFC Mitigation Policy to reflect current opportunities to pursue mitigation.

Action f) Develop guidelines for recreation for WGFC approval. This document will be useful in reviewing projects submitted through the recently developed Wyoming Outdoor Recreation Trust Fund.



Strategy IV) Protect important fishery resources with instream flow water rights.

The WGFD's Instream Flow Biologist will continue to pursue instream flow filings to protect important fisheries. The following new or specific actions will be pursued or emphasized: (See Actions 1.1.1 through 1.1.9 Lobb and Dey 2025).

Action a) Conduct annual assessments and updates to stream prioritizations for instream flow water rights. Annual assessments will include consideration of instream flow water rights on streams, on public lands, improved through efforts under Goals 2 and 3.

Action b) Complete instream flow study reports and water right applications for high-priority waters.

Action c) Conduct hydrologic studies for each candidate instream flow segment.

Action d) Coordinate instream flow water right applications with the WWDC and SEO.

Action e) Improve estimates of natural flows in ungauged streams.

Action f) Conduct or pursue funding for various instream flow research needs.

Action g) Identify existing instream flow segments that are potentially at risk of injury from junior appropriators.

Action h) Investigate new instream flow methods for application in Wyoming.



Strategy V) Develop water management capacity to proactively prepare for changes in water availability and minimize impacts to fishery and wildlife resources.

The WGFD Water Rights Team presently functions to identify solutions to water right issues involving Commission-held properties and associated with WGFD projects. This team can address some actions under this strategy.

The following new or specific actions will be pursued or emphasized:

Action a) Create or re-assign a position devoted to water management issues and actions identified below and in Strategy VI.



Action b) Given predictions related to water shortages/drought, use monitoring data to identify needs for and prioritize water management actions.

Action c) Work with partners and legislators to find and implement water management solutions like short or long-term leases, or voluntary conversions of water rights to instream flow or other conservation water rights.

Action d) Pursue acquisition of water rights as water law and public acceptance allow for fishery and wildlife conservation.





Strategy VI) Protect fisheries and associated habitat from water development and management proposals that impact aquatic habitats.

Representatives from the WGFD Water Rights Team and members of fish staff, including the instream flow biologist and the water management position proposed under Strategy V. Action a, would be primarily responsible for implementing the specific actions under this strategy. In addition, regional fisheries supervisors provide critical review of water development proposals and are the primary line of communication with project sponsors. This role is supported by regional aquatic habitat biologists

The following new or specific actions will be pursued or emphasized:

Action a) Coordinate regularly with and attend meetings of the Water Development Commission to maintain awareness of potential water projects and provide effective WGFD technical commenting to avoid or offset aquatic impacts.

Action b) Coordinate regularly and attend meetings with the State Engineer's Office and Board of Control to understand water issues and communicate on behalf of the WGFD.

Action c) Engage regularly with water users and managers through membership and activity in the Wyoming Water Association.

Action d) Serve on the Water Research Program Committee of the Office of Water Programs at the University of Wyoming.

Action e) Participate in the Instream Flow Council to track national issues and how they relate to Wyoming and remain current with scientific and technological advancements.

Action f) Respond effectively to water related federal and state legislation.

Action g) Coordinate and engage proactively and regularly with WWDO and BOR on existing and proposed water management and water development projects.

Action h) Pursue increased winter release levels from Glendo Dam.



Strategy VII) Implement actions for the WGFD's Water Management Unit Plan.

Action a) Convene regular meetings of the WGFD's Water Management Team to address issues associated with acquisition, management, abandonment or disposal of water rights and provide recommendations to WGFD personnel and the Commission.

Action b) Respond as appropriate to requests from other state agencies, federal agencies and non-governmental wildlife management organizations for assistance with water management applications.

Action c) Provide assistance, upon request, to the Wyoming Water Development Commission to conduct studies or supervise studies done by consultants hired by WWDC to evaluate potential aquatic impacts, benefits and mitigation needs on proposed projects funded by the state legislature.

Action d) Provide effective comments on water development proposals.

Action e) Conduct internal training to increase understanding of WY water law.



GOAL 2. RESTORE AQUATIC AND TERRESTRIAL WILDLIFE HABITATS



Strategy I) Inventory and evaluate wildlife habitat using standardized inventory techniques (e.g., Wyoming Habitat Assessment Methodology, Ecological Site Inventory, Cooperative Sage-Grouse Habitat Assessments, Rapid Habitat Assessments, Wyoming Stream Quantification Tool (WSQT), etc.).

Terrestrial, aquatic habitat, and habitat and access biologists are the primary agents for this strategy, though other biologists may occasionally engage. Terrestrial habitat biologists will continue to inventory areas selected for priority mule deer herds and prepare management recommendations. The THABs will collect, analyze and report vegetation data in a format that informs population management decisions and annually engage multiple Wildlife Division work units and other agency or research partners in systematically collecting vegetation data.

The AHABs will continue to collect water temperature information on at least two streams per region and collect WHAM data on watersheds with limited information or possible habitat limitations.

The following **new or specific actions** will be pursued or emphasized:

-  **Action a)** Develop an approach to identify vulnerabilities of landscapes, riverscapes and species, then prioritize the areas for protection and restoration.
- Action b)** Develop habitat metric needs that could be incorporated into federal land management plans as Standards or Desired Future Conditions for Fish and Wildlife.
- Action c)** Review National Fish Habitat Assessment results in 2027 for Wyoming streams and apply as appropriate.
-  **Action d)** Maintain long-term, annual water temperature monitoring on a minimum of two streams in each region, conduct analysis on the data to identify patterns or trends, and compile regional data to observe statewide changes.
- Action e)** Use the WSQT to determine the relative amount of improvement and functional lift from stream restoration projects.
- Action f)** Promote and support the development and refinement of stream, riparian and wetland GIS data products like the National Hydrography Database.
- Action g)** The THABs will continue to prioritize vegetation data collection in priority mule deer herds as well as pre- and post-treatment project areas. This data should be analyzed and shared to improve future management.
- Action h)** Conduct RHAs in all priority mule deer and focal deer herds which will be summarized every five years and considered for herd unit objective reviews.
- Action i)** Prior to study finalization collaborate early with all internal and external research partners to ensure habitat related objectives are integrated into study designs, data collection methods and analysis especially for mule deer and moose projects.
- Action j)** Collaborate with researchers and Science Research and Analytics Unit to evaluate data collected from wildlife research studies to identify and prioritize habitat treatments that have the highest likelihood of having positive benefits (i.e. Use vs. availability, positive correlation to nutritional condition, etc....) to focal species such as mule deer and moose.



Strategy II) Develop scientifically and technically sound habitat projects, which incorporate climate adaptation strategies, and wisely use sportspersons and partner funding to address important issues to benefit fishery and wildlife resources.

This strategy will be implemented at multiple levels from a broad variety of staff throughout the WGFD working together using various processes such as outlined in this plan. For example, habitat and other biologists will develop project applications annually or more frequently depending on funding sources. Regional staff will review and rank project proposals. The Habitat Technical Advisory Group will review and prioritize proposals using SHP priority area maps and other information.

The following new or specific actions will be pursued or emphasized:

-  **Action a)** Prioritize projects that are more likely to build resilience to climate change and provide climate adaptation benefits to numerous species.
-  **Action b)** Identify areas that are expected to remain or become suitable as the climate changes, even outside of historic ranges (i.e., for imperiled species), and may serve as key source populations and allow for other limitations to be addressed.





Strategy III) Develop new and nurture existing coalitions, partnerships and other relationships to accomplish habitat projects.

Staff at all levels will continue liaisons and coordination with conservation organizations, private stakeholders and other land management agencies, as well as to foster new relationships with groups that promote wildlife habitat enhancements and sustainable natural resource management. The WGFD will strive to have at least one employee attend each Wyoming Wildlife Natural Resource Trust meeting. Program managers and fiscal administrators will continue to train employees and maintain staff needed to ensure accurate and timely contractual and financial operations occur with funding entities. The terrestrial habitat program manager will maintain the WGFD – Natural Resources Conservation Service Memorandum of Agreement through annual meetings and coordination. All personnel need to prioritize activities that foster improved working relationships with other government agencies, private individuals and NGOs.



Strategy IV) Emphasize implementation of watershed/landscape scale habitat projects.

Staff at all levels will emphasize landscape-scale habitat restoration when developing work schedules and prioritizing projects. This may include cross-jurisdictional efforts spanning regional, land ownership, management, or other boundaries. Watershed level habitat inventories will continue to be collected to support larger-scale enhancements.



Strategy V) Promote sound riparian habitat with functioning riparian communities.

This strategy will be executed primarily by habitat biologists, though other biologists and staff are integral. Biologists will continue to work with land managers and landowners to transplant and restore beaver to historical and suitable unoccupied or under occupied habitat. Biologists also will work with land managers and landowners to provide education and technical assistance to develop infrastructure mitigation techniques related to conflicts with beavers. Habitat biologists will work to facilitate grazing management that mutually benefits livestock and wildlife and provides for vegetation resiliency. Finally, habitat biologists will promote wise human development of riparian areas including roads, structures, agriculture and other activities.

The following new or specific actions will be pursued or emphasized:

-  **Action a)** Improve riparian habitat through livestock grazing management, fence conversions to wildlife-friendly standards, or fence riparian areas to reduce herbivory by livestock and use riparian restoration techniques to support greater opportunities for animal movement in the face of changing climate conditions.



Strategy VI) Promote functioning stream channels that maintain natural processes and aquatic habitat.

This strategy will be primarily executed by AHABs, though other biologists and staff are integral. Biologists will work with land managers, private landowners and conservation organizations to enhance or restore stream channels and floodplains. Restoration will follow natural channel design principles and include a thorough assessment of existing geomorphology and cause-effect relationships. Channel restoration will consider watershed constraints, and use staged channels to accommodate more extreme high and low flows than historically common. At a minimum, all stream restorations will include objectives to address floodplain connectivity, lateral stability, channel bed diversity and riparian vegetation.

The following new or specific actions will be pursued or emphasized:

- Action a)** Enhance and maintain floodplain connectivity on rivers and streams. Emphasize enhancing floodplain connectivity for all river restoration projects.
-  **Action b)** Prioritize restoration of cold-water spring streams, groundwater and downstream connectivity as cold water refugia.
-  **Action c)** For all river restoration projects, emphasize achieving vibrant riparian vegetation with appropriate density and diversity of woody plants to provide shade, erosion protection and other ecosystem functions.
- Action d)** Work with city government, conservation groups and others to enhance or restore lentic and lotic systems and their associated habitats near populations centers around Wyoming such as community pond development, boat ramps, fish attractors, etc.





Strategy VII) Promote capturing and storing water in floodplains and shallow aquifers by emulating natural methods to enhance wildlife habitat and function and to buffer hydrological stresses related to drought and climate change.



The following new or specific actions will be pursued or emphasized:

-  **Action a)** Restore ecosystem function to increase seasonal water storage through a variety of methods, whether it be a low-tech process based restoration techniques or by translocating beavers.
-  **Action b)** Develop wetlands and flood irrigation in recharge areas to increase aquifer recharge as appropriate for the local area and resource.
-  **Action c)** Increase irrigation-related water savings via more efficient techniques.
-  **Action d)** Develop regional and/or statewide beaver restoration plans identifying scope of efforts and locations to receive beaver, as well as common goals and objectives, and a minimum level of monitoring.
-  **Action e)** Develop floodplain depressional wetlands and alcoves within the channel to provide slow moving aquatic habitat, groundwater recharge, sediment retention and hyporheic exchange



Strategy VIII) Mimic natural disturbance regimes using fire, mechanical, biological and chemical methods.

This strategy will be primarily executed by THABs, though other biologists and staff are integral. Biologists will coordinate and plan with federal and state agencies to promote managing fires for resource benefits to allow fire to resume its natural role in the ecosystem. Biologists also will use prescribed fire, mechanical, biological or chemical treatments as tools to mimic natural processes to enhance wildlife habitat across all land ownerships.

This strategy is complicated by the confounding influence of climate change and noxious weed expansion with its role in altering what is considered a natural disturbance. Wildfire intensity, frequency and magnitude are expected to increase beyond levels experienced in the last approximately 100 years. The potential for these wildfires to serve as models of natural disturbance will need to be evaluated on a case-by-case basis. Post disturbance/treatment impacts, such as weed expansion and grazing management, must be considered in light of perceived benefits of fire.

Action a) Incorporate use of the recommendations outlined in the WGFD Wildfire Response Guide with partners after wildfires.

Action b) Refer to the Invasive Annual Grass Implementation Plan and Wyoming Guidelines for Managing Sagebrush Communities when dealing with non-native vegetation species.



Strategy IX) Work with landowners, land managers and conservation organizations on grazing management that enhance sustainability of rangelands and wildlife habitat.

This strategy will be primarily executed by THABs, though other biologists and staff are integral. Biologists will pursue and cooperatively develop habitat treatments and grazing management plans that promote healthy rangelands and high-quality wildlife habitat, while also providing economic sustainability for livestock producers. They will develop and use partnership funding sources and long-term agreements that provide infrastructure and incentives to facilitate grazing management for resiliency of vegetation.

The following new or specific actions will be pursued or emphasized:

Action a) Biologists will pursue and develop forage reserves and grass banks that provide rest and rotation for livestock grazing strategies.

Action b) Work with Farm Service Agency to enroll private lands in the Grassland Conservation Reserve Program to provide short-term incentives to maintain land as native vegetation cover.

Action c) Biologists will work with landowners and land managers to prevent the spread of disease within wildlife habitats. Biologists will pursue wildlife occupancy agreements to increase available winter range occupancy agreements near elk feedgrounds to reduce elk reliance on supplement feed to slow the spread of chronic wasting disease, and reduce risk of brucellosis to cattle.

Action d) The department working with its veterinarian, the Sybille Research facility and universities will strive to understand and manage mineral salt sites and their potential role in increasing the propagation, concentration and spread of disease within wildlife populations and habitats.

Action e) Work with Bureau of Land Management to incorporate wildlife considerations in the 14 wild horse herd management areas in Wyoming.

Action f) Continue to use site specific grazing strategies on WHMAs to promote vegetation management benefitting available wildlife forage.

Action g) Promote research and education regarding grazing management techniques. An example is a virtual fence workshop.



**Strategy X)** Manage aspen, cottonwood, willow, woody draw and mixed mountain shrub communities for sustainability.

This strategy will be primarily executed by THABs though other biologists and staff are integral to achieving this strategy. Biologists will pursue and cooperatively develop habitat treatments that mutually benefit wildlife and livestock.

The following new or specific actions will be pursued or emphasized:

Action a) Manage big game wildlife populations at levels that sustain these vegetation communities through appropriate browsing and herbivory levels.



Action b) Conduct conifer removal projects to recharge the aquifer and benefit riparian systems further down the drainage, as well as support diverse and productive understory vegetation communities.

Action c) Develop projects that enhance and protect communities of aspen, cottonwood and willow woody draws containing species such as chokecherry, plum, serviceberry, hawthorn and mahogany; and mixed mountain shrub.

**Strategy XI)** Reduce prevalence of non-native vegetation and emphasize native perennial plants and plant community diversity and sustainability.

This strategy will be primarily executed by THABs, though other biologists and staff are integral. Biologists will pursue partnerships and relationships to maintain WGFD awareness of the incidence and status of invasive species and options for their control. They will use proven habitat manipulation techniques to manage invasive salt cedar and Russian olive, and to restore native cottonwood and willow complexes. Biologists will use proven habitat manipulation techniques across multiple land jurisdictions to manage invasive annual grasses and other invasive plant species. They will manage wildlife and promote livestock numbers to maintain vigorous, healthy and sustainable landscapes.

The following new or specific actions will be pursued or emphasized:

Action a) Prioritize invasive annual grass infestations statewide for treatment using the newly developed online platform.

Action b) Explore new approaches for treating and mapping invasive annual grass infestations, with additional emphasis on leading edge infestations.



Action c) Utilize an Early Detection Rapid Response framework for newly detected invasive plant species.

Action d) The HPP staff will emphasize the importance of controlling non-native vegetation and the use of native perennial plants and plant community diversity and sustainability during reclamation in WER commenting

Action e) Work with the University of Wyoming and local weed and pest districts to further develop an integrated statewide approach to assessment, treatment and monitoring of invasive species.

Action f) Pursue county and statewide listing of cheatgrass to encourage additional resources that prioritize treatments.

**Strategy XII)** Mitigate impacts of development and other human activities on habitat.

Staff at all levels will mitigate impacts of development and other human activities on habitat. Staff will continue to research, develop and implement successful active/post-development reclamation techniques. They will stress the need and requirement for mitigation (e.g. avoidance, minimizations, compensation) as specified under the appropriate state and federal laws, State of Wyoming executive orders as well as the Commission's Mitigation Policy in environmental commenting. Staff will advocate and incorporate resource maintenance (i.e., avoidance, then minimization), then resource compensation (i.e. financial compensation, or approved habitat enhancement/restoration) of impacts during participation in land management and project planning, process review and environmental commenting. Finally, staff will continue to evaluate required mitigation monitoring data to improve mitigation standards and stipulations.

The following new or specific actions will be pursued or emphasized:

Action a) Partner with, provide data to and support groups that encourage smart growth/retention of agriculture open lands to control urban/suburban sprawl.

Action b) Identify and communicate mitigation actions suitable for offsetting impacts to wildlife resulting from development and other human activities.

Action c) Participate in the U.S. Army Corps of Engineers interagency review team for stream and wetland mitigation banking to ensure that impacts to stream and wetland habitats are adequately mitigated.

Action d) Work with prospective sage-grouse mitigation bank proponents and the Compensatory Mitigation Oversight Group to review and provide input on the biological merits of new bank proposals.

Action e) Support research evaluating the effects of anthropogenic disturbance on wildlife fitness and population management.





Strategy XIII) Provide occasional, smaller-scale habitat enhancements to target specific species or assemblages of wildlife or to target life stages or seasonal needs of wildlife.



This strategy will be primarily executed by AHABs, THABs and H&A Biologists, though other biologists and staff are integral. Biologists will implement habitat enhancements that increase wildlife-based recreation as appropriate and that are complementary to other goals and objectives. For example, as interest and opportunity allow, fisheries biologists will continue to increase habitat complexity and provide local fish cover by adding used Christmas trees or other devices into lakes, ponds and reservoirs. Likewise, fisheries biologists will develop community fishing ponds to address identified needs. Legume seeding projects or other projects intended to develop a working relationship that will expand in the future are also important to implement.



Strategy XIV) Monitor effectiveness of habitat projects in reducing habitat issues and enhancing wildlife habitat.



Biologists will collaborate with land managers, landowners and other partners to monitor the effectiveness of habitat enhancements. Monitoring will consist of various methods evaluating criterion identified in project objectives pre- and post-treatment. Biologists will communicate monitoring results among WGFD regions and with federal and county partners for future improvement of management practices. Finally, biologists will work with the University of Wyoming and other scientists to research the effectiveness of habitat restoration efforts.



GOAL 3. CONSERVE, ENHANCE AND PROTECT FISH AND WILDLIFE MIGRATIONS



Strategy I) Inventory and evaluate big game migration corridors as well as fish passage barriers.

These actions are led by the big game migration coordinator and the fish passage coordinator, with additional actions by wildlife and fisheries biologists and habitat biologists. These staff members, along with contractors and universities, will continue to inventory, assess and prepare management recommendations. The fish passage coordinator and fish passage biologist will opportunistically collect fish passage data at man-made obstructions throughout the state, assist USFWS with populating and review of the aquatic barriers national database and use the database to identify priority barriers. GPS collar studies will continue in order to evaluate seasonal use patterns of big game animals. Big game migration corridors will be identified and designated through the public process outlined in the Governor's Migration Corridor Executive Order 2020-1.

The following new or specific actions will be pursued or emphasized:

Action a) Continue to support internal efforts and partners with the Wyoming Migration Initiative and University of Wyoming to collect seasonal wildlife movement data and conduct analyses to help prioritize management actions to appropriate areas.

Action b) Improve our ability to prioritize projects through visualization of existing data using interactive map applications.

Action d) Support sharing fish and wildlife migration data with project proponents, land managers, local governments, etc. to inform land use management.

Action e) Support the WAFWA Wildlife Movement and Connectivity Initiative.



Strategy II) Implement projects to address and preserve migration corridors, reduce connectivity issues and enhance fish and wildlife migrations.

These actions are led by the terrestrial migration coordinator and the fish passage coordinator, with additional actions by wildlife and fisheries biologists and habitat biologists. Staff members will continue to maintain and develop coalitions, partnerships and other relationships to acquire funding and support for fish and wildlife connectivity issues. Big game corridors will continue to receive attention as we work to remove and reduce barriers. Projects will be pursued and implemented to increase movement opportunities for fish and wildlife. Fish screens will be selectively employed in situations with high fish loss to ditches and where reasonable maintenance plans can be implemented.

The following new or specific actions will be pursued or emphasized:

Action a) Ensure adequate agency funding for fish passage and wildlife migrations through the Wyoming Game and Fish Commission's various appropriations.

Action b) Leverage outside funding tied to the Department of Interior's Secretarial Order 3362 and other funding resources to expand the impact of big game migration projects.

Action c) Prioritize conserving existing connectivity conditions over reconnecting and repairing broken systems.

Action d) Continue coordination and planning migration work through the Movement Matters Team and carry out work identified in the Operational Plan.

Action e) Improve internal capacity to work in migration projects from the Movement Matters Team Operational Plan.

Action f) Implement projects such as wildlife highway crossings, fence modification or removal, conservation easements, invasive species management and other vegetation management strategies to ensure function of big game migration corridors into the future.



Action g) Implement wildlife-friendly fencing everywhere where it is appropriate on our WHMAs by 2033.

Action h) Improve fence maps throughout the state through collaboration with external partners and private landowners to include fence conditions and priority for modification.



Strategy III) Protect and maintain river systems and watersheds with existing high levels of connectivity for aquatic wildlife.

These actions are led by the fish passage coordinator and biologist with additional actions by fisheries biologists and habitat biologists. Staff members will identify watersheds with existing high levels of connectivity that allow aquatic wildlife upstream and downstream passage. They will continue to provide comments through the Wildlife Environmental Review and Integrated Resource Management Application systems on human development proposals to minimize threats to aquatic connectivity. Biologists, supervisors and managers will coordinate management activities with the Wyoming Water Development Commission.

The following new or specific actions will be pursued or emphasized:

Action a) Construct barriers to prevent upstream movement of non-native species while restoring upstream native species.

Action b) Use the fish passage database to prioritize fish passage projects.





Strategy IV) Protect and maintain wildlife migration corridor functionality including high-use and stopover areas, as well as other important areas of seasonal wildlife movement.

These actions are led by the Habitat Protection Program, THABs and the Big Game Migration Coordinator with additional actions by wildlife biologists and habitat biologists. Through the HPP, staff will maintain migration corridor functionality by identifying avoidance and minimization measures, and provide policy reviews for assessment of compliance with the State of Wyoming Mule Deer and Antelope Migration Corridor Protection Executive Order 2020-1 for project proponents and permitting entities on State and Federal lands. Staff will collaborate with the Wyoming Department of Transportation, Office of State Lands and Investments and non-governmental organizations to assist with maintaining the function of migration corridors. Through HPP, staff will provide guidance to project proponents, permitting entities and land managers to maintain wildlife movement pathways and habitat connectivity, and minimize impacts to the landscape important for wildlife movement.

Action a) Staff will continue to protect migration corridor functionality through the use of voluntary conservation easements, land acquisition or applicable stipulations in land management planning documents.

Action b) Work to align planning processes of other Wyoming state agencies related to fish and wildlife movements with our priorities.



IMPLEMENTATION STRATEGIES



Strategy I) Work with private landowners, other agencies and conservation groups to understand issues and communicate habitat goals.



This strategy will be pursued by all those engaged in habitat protection and restoration. This includes meeting at least once annually with BLM, Forest Service, NRCS and other federal partners to coordinate habitat management.

Action a) Implement pre- and post-treatment monitoring for projects that introduce disturbance or other management change into a landscape. This can include photo points, density circles, line point intercept, ocular estimates and other established techniques.



Strategy II) Communicate habitat efforts and project results consistently with partners and internally within the WGFD and Commission.



This strategy will be implemented at a general level by all those engaged in habitat efforts. At a more specific level, this strategy will be implemented by sharing this habitat plan with the Governor's Office, State and Federal agencies, private landowners, conservation districts, and groups and the public.

The following new or specific actions will be pursued or emphasized:

Action a) Maintain and annually update the Habitat Viewer database containing project data from aquatic, terrestrial and habitat and access biologists.

Action b) Habitat program managers will work with Communications Division staff to produce an annual report highlighting habitat projects.





Strategy III) Manage the WHMAs to meet fisheries and wildlife objectives, allow for compatible wildlife oriented recreation and meet the purposes under which the property was originally acquired.

This strategy will be primarily achieved by staff in the Habitat and Access program with assistance from regional biologists and managers. Staff will continue to use regional and administrative teams to assist with the administration and management of the WHMAs.

The following new or specific actions will be pursued or emphasized:

Action a) Monitor habitat on WHMAs with vegetation transects, riparian greenlines, photo points, stream temperature, etc. as needed to understand resource condition and balance management approaches.

Action b) Survey and control invasive species on WHMAs with a proactive and coordinated approach.

Action c) Advance WHMAs as forage reserves when livestock grazing will benefit or improve wildlife habitat on the WHMA providing it is consistent with the Managed Land and Access Summaries, regulations, policies and guidelines and does not impact wildlife-oriented recreation.

Action d) Continue to improve or develop wildlife-oriented recreational opportunities on the WHMAs, while balancing such recreation with habitat conservation.

Action e) Refine and update the MLAS for all WHMAs with input and approval from WHMA teams by December 2025.



Action f) Assess management objectives of WHMAs to determine any needed changes based on climate projections.



Action g) Monitor changes in vegetation species composition on winter ranges to ensure forage availability for wintering wildlife.

Action h) Ensure irrigation infrastructure is capable of capturing and utilizing allotted water rights on WHMAs. Balance use of water rights with aquatic habitat needs and develop minimum flow objectives where needed.



Action i) Assess irrigation technologies (flood, pivot, sprinkler) for the best use, given climate ramifications, management objectives, and priorities.

Strategy IV) Foster and support funding for continuous training among habitat biologists.

This strategy will be pursued throughout the habitat sections with cross-over to wildlife and fisheries biologists. Staff will continue to use available resources within the work units to cross train and educate one another using internal and external experts. Staff will continue holding biennial meetings among all work units to share innovative approaches and foster training and comradery. Additional annual work unit meetings will continue to provide training opportunities.



Strategy V) Pursue new research and synthesis of available research to address key climate change vulnerability and adaptation information needs. This strategy will be pursued throughout the habitat sections and the HTAG with crossover to wildlife and fisheries biologists.

The following new or specific actions will be pursued or emphasized:

Action a) At least once annually, the HTAG chair will call for committee review and discussion of the information needs listed in Cross, et. al.

Action b) The HTAG will encourage development of proposals or other actions to address key information needs.

Strategy VI) Review and update this statewide habitat plan and associated priority areas.

This will be implemented under the direction of the HTAG and include a review of habitat priority areas, goals, strategies and actions and other elements of the SHP.

Action a) The HTAG chair will lead habitat plan revision to be completed by Dec. 30, 2030.

Action b) The HTAG chair will annually call for proposed priority areas updates and revisions. Updated priority areas and associated narratives will be published once annually by Jan. 31.



APPENDIX 1

STATEWIDE HABITAT PLAN VERSUS THE STATE WILDLIFE ACTION PLAN

The SHP and the State Wildlife Action Plan are easily confused with one another. However, the SHP pertains mainly to habitat issues across Wyoming and the SWAP deals with the state's effort to conserve Species of Greatest Conservation Need).

The WGFD developed the current version of the SWAP in 2017, in cooperation with a number of conservation partners and other interested parties, including agencies, academia, conservation organizations and the general public. It is a plan intended to direct the state's effort to conserve SGCN and to allow the state to maintain eligibility for the U.S. Fish and Wildlife Service-administered State Wildlife Grant funding.

While the two plans overlap in several regards, the SHP is distinctly a document to guide internal WGFD actions and priorities. Both plans provide direction for WGFD actions. The SWAP emphasizes individual species and the habitat actions needed to ensure their future; the SHP emphasizes habitat communities and identifies how actions that perpetuate vital habitats benefit communities of wildlife. The SHP further includes a strong perspective toward habitat actions to benefit game species but through its emphasis on functioning landscapes and watersheds it strives to maintain a broad perspective that pursues protecting and improving entire wildlife communities.

The SWAP identifies five major challenges facing SGCN and for maintaining fish and wildlife diversity across the State: 1) rural subdivisions and development; 2) energy development; 3) invasive species; 4) climate change and 5) disruption of historic disturbance regimes. In addition to identifying SGCN, the SWAP also identifies important habitats for those species; with portions of many of these habitats included as crucial and enhancement priority habitat areas in the SHP. The priority areas identified in this revision to the SHP were based on the needs of all wildlife.



APPENDIX 2

PRIORITY AREA DEVELOPMENT AND GIS REFERENCE DATA DESCRIPTIONS

With guidelines, habitat biologists developed draft priority areas. The overall approach involved using existing GIS data layers to depict and derive priority areas to the greatest degree possible, rather than developing new areas. A driving consideration for using existing GIS data layers was to make future SHP priority area revisions and updates seamless and linked to routine updates of pre-existing data layers. During the development process, biologists had several GIS data layers available to use as a reference. These included previous priority areas. Biologists were instructed that their goal was NOT to recreate the previous priority areas. However, reviewing the previous areas might serve to prompt consideration of additional GIS data layers to incorporate or to capture significant values or issues. Habitat biologists consulted with other regional staff to varying degrees during initial area development. Guidance was provided to the biologists in using an ArcGIS Pro project to review and develop priority areas. Following the biologist's review of priority areas and consultation by their Regional Leadership Team, video work sessions were conducted with each region's habitat biologists, the GIS specialist and HTAG habitat managers to discuss the proposed priority area changes. Additional meetings were conducted with nongame biologists and migration coordinators to discuss their proposed priority area updates. Next, the GIS specialist compiled all GIS data submitted for priority area changes to create the updated priority area layers. This was followed by a final review of the priority areas by HTAG habitat managers.

Priority areas are organized into maps which reflect the three goals under the SHP: Crucial, Restoration and Connectivity areas. There are Crucial areas, such as instream flow segments, within Restoration and Connectivity areas. To improve the visibility of priority areas, they also are separated into Aquatic and Terrestrial maps, then symbolized as points, lines or polygons. The types of priority areas developed and shown in the maps are described below.

GOAL 1 - CRUCIAL PRIORITY AREAS

• Aquatic lines

- **Blue ribbon streams:** Blue ribbon streams represent highly productive trout fisheries and nearly all are recognized Crucial areas. The few excluded represent areas sustained by stocking. Some blue ribbon priority streams meet the 600-plus pounds/mile criteria but have not yet been formally recognized on the WGFD's official listing of blue ribbon streams.
- **Instream flow:** Instream flow water rights are a tool for the State of Wyoming to protect critical fisheries and have been used since legislation in 1986 recognized instream flow as a beneficial use of water. All instream flow segments are represented as Crucial areas.

• Aquatic polygons

- **Riparian:** The identified corridors represent the most intact and functional riparian communities. Habitat biologists identified major riparian stream segments using professional judgment. Identified segments often represent the largest riparian systems in each region, and are considered to be ecologically functioning though they may contain relatively small impacted areas. Some biologists used the riparian habitat data from the 2017 SWAP to inform their identification of major riparian strongholds. Riparian stream lines chosen by the biologists were buffered by half-a-mile on either side, creating corridor polygons. These can overlap line segment types or other polygons. These riparian communities support numerous fish and wildlife species including species of greatest conservation need.
- **2027 SWAP Aquatic Conservation Areas:** These watersheds are from the 2027 State Wildlife Action Plan (SWAP) and are areas containing higher numbers of, or more sensitive, Species of Greatest Conservation Need.
- **Fish SGCN:** These HUC 12 watersheds are additional areas, beyond those already identified as SWAP Aquatic Conservation Areas, that contain significant native aquatic species or species assemblages. This category was created because of new species distribution or population abundance information since SWAP publication warrants recognition of these areas as important. SGCN areas should be distinct from, and not overlap, SWAP Aquatic Conservation Areas.
- **Habitat and access:** Wildlife Habitat Management Areas were purchased by the Wyoming Game and Fish Commission as an investment to protect crucial habitat for a variety of wildlife including fish, big game, waterfowl, upland birds, herpetofauna and non-game birds, mammals and fish. WHMAs are extremely important to Wyoming's citizens because of the opportunities they provide to hunt, fish, watch wildlife, and recreate.
- **Wetlands:** The outer boundaries of wetland priority areas, terrestrial and aquatic, were delineated by a 2010 wetlands analysis that used wetland density to identify complexes across the state. The Wyoming Bird Habitat Conservation Partnership chose nine complexes across the state as high priorities for conservation work due to ecological values and project potential. The nine areas were further refined into SHP priority areas. Crucial Area boundaries are based on HUC 12 units within the overall wetland priority boundaries described above. These areas were chosen based on a combination of features, including high amounts of stable and increasing surface water in spring and fall, known wetland obligate avian nesting sites (trumpeter Swan, colonial nesting birds, great blue heron), and regionally important Sandhill crane pre-migration staging grounds. The surface water resiliency analysis was provided to the WGFD by Patrick Donnelly of USFWS Intermountain West Joint Venture and University of Montana.

• Terrestrial polygons

- **Big game migration bottlenecks:** Migration corridor bottlenecks are defined as any portion of a mule deer or pronghorn migration corridor where animals are significantly physically or behaviorally restricted according to the Migration Corridor Executive Order. These



narrow areas are a high priority for conservation efforts because the potential to sever the corridor or disturb animals is exacerbated at these pinch points. They are strictly associated with designated migration corridors.

- **Big game migratory habitat:** Within migratory habitat, the overarching objective is to maintain functionality for connectivity and foraging opportunity for ungulates. Various solutions have been developed to conserve or enhance functionality such as fence modifications, invasive species management, conservation easements, wildlife highway crossings and vegetation management including prescribed fire, mechanical and chemical prescriptions. Additional site-specific solutions are important to develop and implement with partners across all land ownerships. These polygons are derived from GPS collar data that have been published in USGS “Ungulate Migrations Across the Western U.S.” publications.
- **Crucial range:** Crucial range can describe any particular seasonal range or habitat component — often winter or winter/year-long range in Wyoming — but describes that component which has been documented as the determining factor in a population’s ability to maintain itself over the long term. Crucial ranges for the following species were made into crucial priority areas: deer, elk, pronghorn, moose, bighorn sheep and Rocky Mountain goat. This year, Elk Parturition Areas were also included in crucial range.
- **Foothills transition:** This designation is given to areas where significant habitat values exist, not otherwise covered by other polygons. These values justify conservation easements and other conservation actions and often connect designated crucial habitat priority areas into one cohesive area. These priority areas were created from HUC 12 polygons.
- **Habitat and access:** WHMAs were purchased by the WGFC as an investment to protect crucial habitat for a variety of wildlife including fish, big game, waterfowl, upland birds, herpetofauna and non-game birds, mammals, and fish. WHMAs are extremely important to Wyoming’s citizens because of the opportunities they provide to hunt, fish, watch wildlife, and recreate. The Strategic Plan’s “Further habitat protection, enhancement and restoration on Wildlife Habitat Management Areas” strategy reflects the high priority of the WHMAs for the department’s efforts and funding. WHMAs demonstrate conservation and protection of crucial aquatic or terrestrial wildlife habitats, consistent with Goal 1 of this habitat plan.
- **Moose habitat:** Important habitat for moose in Wyoming are represented by this designation. Moose use several habitat types within these areas including conifer, aspen, riparian habitats from 8,000-11,000 feet in elevation, and mixed mountain shrub communities. High-elevation areas containing conifers, willows and aspen provide high-quality forages and refuge from thermal stress during hot, summer months. Moose rely on riparian habitat during the summer for forage and, importantly, standing water that facilitates cooling. Mixed mountain shrub communities found at lower elevations are important during late summer, fall and winter.
- **Multiple:** This category represents a grouping of priority areas that fit within more than one priority area category.
- **Riparian:** The identified corridors represent the most intact and functional riparian communities. Habitat biologists identified major riparian stream segments using professional judgment. Identified segments often represent the largest riparian systems in each region and are considered to be ecologically functioning though they may contain relatively small impacted areas. Some biologists used the riparian habitat data from the 2017 SWAP to inform their identification of major riparian strongholds. Riparian stream lines chosen by the biologists were buffered by half-a-mile on either side, creating corridor polygons. These riparian communities support numerous fish and wildlife species including species of greatest conservation need.
- **Sage-grouse Core:** Version 4 of Core management areas are represented as crucial priority areas.
- **Sage-grouse connectivity:** There are a host of sagebrush and grassland obligate and near-obligate wildlife species requiring conservation and maintenance to maintain populations. Due to the cumulative effects of human impacts and habitat degradation and conversion in northeast Wyoming, conservation efforts directed in these communities need to protect and enhance these areas to maintain wildlife populations and their habitats.



- **Sagegrouse winter concentration:** This area contains habitats crucial to sage grouse during the winter season, including sage grouse winter concentration areas.
- **Species of Greatest Conservation Need:** The primary GIS reference layer for terrestrial SGCN is Species Richness - Tier 1 Bird/Mammal/Herp, which is a distribution model of all SGCN from the 2017 SWAP overlaid with a 1-square-mile hexagon grid. Additional priority areas exist to highlight other areas of importance for additional SGCN.
- **SWAP habitat:** Six habitat types (Aspen/Deciduous Forests; Foothills Shrublands [Mixed Mountain Shrub]; Prairie Grasslands; Riparian Areas; Sagebrush Shrublands; Xeric and Lower Montane Forests [Ponderosa]) from the 2017 SWAP were provided to the biologists to use as reference data. These layers are composed of raster data, which biologists could use to visualize concentrated areas of habitat and draw priority area polygons around those areas.
- **Wetlands:** The outer boundaries of wetland priority areas, terrestrial and aquatic, were delineated by a 2010 wetlands analysis that used wetland density to identify complexes across the state. The Wyoming Bird Habitat Conservation Partnership chose nine complexes across the state as high priorities for conservation work due to ecological values and project potential. The nine areas were further refined into SHP priority areas. Crucial area boundaries are based on HUC 12 units within the overall wetland priority boundaries described above. These areas were chosen based on a combination of features, including high amounts of stable and increasing surface water in spring and fall, known wetland obligate avian nesting sites (Trumpeter Swan, colonial nesting birds, great blue heron), and regionally important Sandhill crane pre-migration staging grounds. The surface water resiliency analysis was provided to the WGFD by Patrick Donnelly of USFWS Intermountain West Joint Venture and University of Montana.

GOAL 2 - RESTORATION PRIORITY AREAS

- **Aquatic points**
 - **Community fisheries development:** Locations where development of community fisheries are desired. Biologists were encouraged to limit this category to top prospects for pursuit in the immediate future. Points are located in the general vicinity of the community, not at the exact location of a proposed pond, access area or fishery.
- **Aquatic lines**
 - **Blue and Red ribbon streams:** Blue and Red ribbon streams represent highly productive trout fisheries. Those which have issues that will be addressed by restoration efforts over the next five years are identified by these line segments. Lines representing Blue and Red ribbon restoration priority streams can overlap polygons, including riparian corridors.
- **Aquatic polygons**
 - **Beaver enhancement:** The WGFD has long recognized that beaver provide valuable ecosystem services through their dam building activities. While sometimes viewed as a nuisance when they remove valuable trees and flood human infrastructure, in places away from human infrastructure they serve a vital role in enhancing watershed function by creating complex floodplain habitats, storing water and sediment and reconnecting incised stream channels. Beaver enhancement priority areas are locations that could benefit from beaver re-introduction.
 - **Habitat and access:** These are 1-mile buffers surrounding WHMAs and select PAAs that habitat & access biologists have determined will be sites of restoration work designed to supplement the work done on the WHMA during the upcoming plan period.
 - **Standing water habitat enhancement:** Habitat work in Wyoming has traditionally focused on stream conditions, but for the 2025 SHP revision biologists proposed limited consideration of enhancing standing waters. The standing waters identified all have relatively limited habitat conditions and potential for enhanced fisheries following habitat work.
 - **Riparian:** The identified corridors represent riparian habitats that need or continue to need restoration efforts. These efforts are undertaken to support numerous fish and wildlife species including species of greatest conservation need. Habitat biologists identified these riparian stream segments using professional judgment. Riparian stream lines chosen by the biologists were buffered by half-a-mile on either side, creating corridor polygons. These can overlap line segment types (e.g. Blue or Red ribbon streams) or other polygons. Biologists identified these separately, and in addition to, other layers like the stream restoration layer so they will often overlap other layers.
 - **2027 SWAP Aquatic Conservation Areas:** These watersheds are derived from the 2027 SWAP and are areas containing higher numbers of, or more sensitive, SGCN. The identified sub-watersheds for habitat restoration work are small portions of the larger SWAP Aquatic Conservation Areas and represent areas where work will be targeted in the next 5 years. These areas do not overlap SGCN or stream restoration areas.
 - **Species of Greatest Conservation Need:** These HUC 12 watersheds are additional areas, beyond those already identified as SWAP Aquatic Crucial Areas, where native species provided the main motivation for targeting habitat restoration work. These areas do not overlap SWAP Aquatic Crucial Areas or stream restoration areas.
 - **Wetlands:** The outer boundaries of wetland restoration priority areas were delineated by a 2010 wetlands analysis that used wetland density to identify complexes across the state. The Wyoming Bird Habitat Conservation Partnership chose nine complexes across the state as high priorities for conservation work due to ecological values and project potential. The nine areas were further refined into SHP priority areas based on surface water resiliency analysis provided to the WGFD by Patrick Donnelly of USFWS Intermountain West Joint Venture and University of Montana. Restoration area boundaries are based on HUC 12 units. These areas fall within the priority area





boundaries described above, but are experiencing higher amounts of decreasing surface water extent or duration in spring and fall than Crucial areas. These areas may also support fewer known nesting sites of wetland obligate avian species, including trumpeter swans, colonial nesting birds and great blue herons. These areas still offer large coverage of wetland areas and associated values to wildlife, but would benefit from restoration and enhancement efforts to maintain or improve these values.

- **Stream restoration areas:** These HUC 12 watersheds are areas with significant habitat issues where we intend to restore stream function and/or improve fish habitats for a variety of species. They are in addition to the SWAP, SGCN, riparian and wetland polygons and Blue and Red ribbon streams, all of which also may see stream restoration activities. The stream restoration polygon layer was defined after first considering the previously described layers and then identifying areas left over and requiring attention. They should not be considered less important, but are often some of the areas where the greatest benefit from restoration can occur. These areas do not overlap SWAP Conservation Areas or SGCN areas.
- **Terrestrial polygons**
 - **Aspen enhancement:** Aspen communities support high biological diversity and are considered one of the most important habitat types in Wyoming. Aspen communities provide food and cover for a multitude of species. While aspen can be a climax species, most aspen communities are seral to conifer and require periodic disturbance to persist. It is estimated that there is less than half the amount of aspen communities than existed pre-settlement. It is imperative for the maintenance of aspen communities to introduce periodic disturbance, especially with the use of fire, and to keep wildlife and livestock densities at a level to allow aspen regeneration.
 - **Beaver enhancement:** The WGFD has long recognized that beaver provide valuable ecosystem services through their dam building activities. While sometimes viewed as a nuisance when they remove valuable trees and flood human infrastructure, in places away from human infrastructure they serve a vital role in enhancing watershed function by creating complex floodplain habitats, storing water and sediment and reconnecting incised stream channels. Beaver enhancement priority areas are locations that could benefit from beaver re-introduction.
 - **Migratory habitat enhancement:** The WGFD has a strong and active program to improve habitat for migrating ungulates. Many of these projects include fence modifications, wildlife crossing projects or other work to enhance connectivity between seasonal ranges.
 - **Multiple:** This category represents a grouping of priority areas that fit within more than one priority area category.
 - **Riparian:** The identified corridors represent riparian habitats that need or continue to need restoration efforts. These efforts are undertaken to support numerous fish and wildlife species including SGCN Habitat biologists identified these riparian stream segments using professional judgment. Riparian stream lines chosen by the biologists were buffered by half-a-mile on either side, creating corridor polygons.
 - **Wetlands:** The outer boundaries of wetland restoration priority areas were delineated by a 2010 wetlands analysis that used wetland density to identify complexes across the state. The Wyoming Bird Habitat Conservation Partnership chose nine complexes across the state as high priorities for conservation work due to ecological values and project potential. The nine areas were further refined into SHP priority areas based on surface water resiliency analysis provided to the WGFD by Patrick Donnelly of USFWS Intermountain West Joint Venture and University of Montana. Restoration area boundaries are based on HUC 12 units. These areas fall within the priority area boundaries described above, but are experiencing higher amounts of decreasing surface water extent or duration in spring and fall than Crucial areas. These areas may also support fewer known nesting sites of wetland obligate avian species, including trumpeter swans, colonial nesting birds and great blue herons. These areas still offer large coverage of wetland areas and associated values to wildlife, but would benefit from restoration and enhancement efforts to maintain or improve these values.
 - **Mule Deer Initiative:** All herd units designated under the WGFD's Mule Deer Initiative were added as Restoration priority areas. In some cases, biologists drew smaller polygons within a herd unit to show where restoration efforts would be focused during the upcoming plan period.
 - **Species of Greatest Conservation Need:** The GIS reference layer for terrestrial SGCN is Species Richness - Bird/Mammal/Herp, which is a distribution model of all Tier 1 SGCN from the 2017 SWAP overlaid with a 1-square-mile hexagon grid. Few, if any, restoration priority areas were developed solely from these areas, but they were used to inform issues addressed within a polygon's boundaries.



- **Partner project:** These areas outline existing and proposed habitat projects with outside partner agencies and organizations. The issues addressed by such projects likely coincide with the other departmental issues listed here, but these areas are important to flag because of the cooperative efforts they demonstrate. The NEPA processes may also be in progress or completed in these areas. These priority areas were drawn according to existing project shapefiles or the field biologist's knowledge of the project extent.
- **Annual invasive grasses:** In accordance with the priority the WGFD's Strategic Plan has given to combating annual invasive grasses, biologists have identified these areas where the predominant habitat need is to treat invasive plant species. These priority areas were drawn according to existing project shapefiles or the field biologist's knowledge of the project extent.
- **Habitat and access:** These are 1-mile buffers surrounding WHMAs and select PAAs that Habitat and Access biologists have determined will be sites of restoration work designed to supplement the work done on the WHMA during the upcoming plan period.

GOAL 3 - CONNECTIVITY PRIORITY AREAS

- **Aquatic lines**
 - **Fish passage:** The Statewide Fish Passage Coordinator identified places containing high connectivity for aquatic organisms to be maintained, places where passage can be enhanced by addressing obstructions and drainages that have work underway or planned for the next 3-5 years. The SWAP Aquatic Conservation Areas and Governors Water Strategy focal watersheds provided a starting point, but this watershed based depiction was replaced with stream line segments to emphasize the connectivity across the watershed. Intermittent and ephemeral waters were excluded.
 - **Connected waters:** This category was created this year to capture the work that habitat biologists have done to restore connectivity to high priority watersheds.
- **Terrestrial lines**
 - **State wildlife crossing priorities:** These are lines based on big game migrations impeded by highways. Biologists proposed to work with WYDOT to improve big game migrations across highways. This designation represents the department's highest wildlife crossing priorities.
- **Terrestrial polygons**
 - **Big Game Migration Corridor:** This category includes designated or identified migration corridors per Governor Mark Gordon's Migration Corridor Executive Order 2020-01.

