

COMMISSION GUIDEBOOK

*Understanding the Fish and Wildlife Commission's
role in strategic partnership with the Agency, the
Director, and Stakeholders*

2022 Edition



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Purpose of this Guidebook

This Guidebook and related products are intended to be a tool for state agency personnel tasked with on-boarding or orientating newly appointed Commission or Board members.¹ It is also a resource for new and seasoned Commission members for more detailed information about their roles and responsibilities on a state agency Commission. It is organized around the critical functions of the Commission and its relationships with the agency, the director, and stakeholders. This Guidebook has been written using information from previous editions, the experiences and expertise of the authors², a literature review of best management practices in natural resource governance, personal interviews with select agency directors and Commissioners, and a survey of all the state’s directors and Commissioners (see Additional Resources section).

This Guidebook provides incoming Commission members with relevant tools, perspectives, and strategies to make decisions that impact the conservation of fish, wildlife, and habitat for current and future generations. It provides an overview of approaches that will allow Commission members to establish and improve relationships with the agency directors, agency staff and stakeholders. It can help Commission members become more effective stewards of public resources and improve governance during their terms of service. This document provides useful background information and guidance for Commission members to be effective trustees of their state’s natural resource public trust assets. It is intended to create awareness of the roles, responsibilities, and challenges to state Commissions and their agencies.

¹ The governing bodies for wildlife are called “Commissions” in some states and “Boards” or “Committees” in other states. For simplicity in this document, we use the term Commission to refer to all governing bodies. In addition, to avoid confusion where the chief executive of the state wildlife agency is called a Commissioner (e.g. AK, KY, ME, VT), we refer to Commission members when discussing members of the governing body.

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Because each state's organization and governance structure are unique, the Guidebook provides a high-level overview of the role and responsibilities of the Commission, Commission members, agency, and stakeholders. Each state will need to provide additional detail on their specific responsibilities, organizational structure, and activities of their agency. New Commission member orientations provide the opportunity to communicate about the agency's culture and norms. Agency staff can adapt the orientation to their Commissioners' interests and personalities.

While previous versions of the Guidebook have been targeted specifically for Commission members, the authors' experience and interviews with select agency directors and Commission members indicate that this material can also serve as a resource for agency directors and staff to better understand fish and wildlife *governance* in the US.

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This guidebook could not have been developed without the assistance, support, and input of AFWA and many state fish and wildlife agency directors and Commission members.

Key Terminology

Agency – Division, department, agency, or bureau with responsibility to conserve and manage wildlife resources

Beneficiaries - members of the public that derive benefits either directly or indirectly from the conservation of wildlife

Commission – The Board, Commission, or committee with a governing role for a conservation agency

Director – Director, Executive Director, Administrator, Commissioner, or Secretary who is the chief executive of a state agency

Good governance – governance that reflects public engagement, fairness, transparency, efficiency, accountability, and responsiveness

Governance – the practices and procedures that determine how decisions are made and implemented and how responsibilities are exercised

Public Trust Doctrine – a legal principle establishing that certain natural resources including navigable waters, and in some states wildlife, are reserved for public use. Such natural resources are held in trust by the government, which has a fiduciary duty to the public to conserve these resources for the public's use and benefit.

Public Trust Thinking – a philosophy that seeks to guarantee the benefits provided by ecosystems are available to current and future generations

Public engagement – a broad range of methods through which the public can be informed about and influence decisions

Social science – methods of inquiry into people's values, beliefs, or behaviors, and how those factors influence the world around us. Social science includes sociology, behavioral psychology, economics, marketing, communication, education, etc.

Stakeholder – Any person who significantly affects or is affected by fish or wildlife or the management actions taken to conserve and manage fish and wildlife resources

Trustee – Elected or appointed officials who administer public wildlife resources for the benefit of current and future generations

Wildlife – Undomesticated terrestrial and aquatic animals, birds, insects, and invertebrates for which the Commission and agency are responsible

History of Conservation and the Conservation Commission System in the US

For millennia, Native American culture, beliefs, and practices moderated the effects of humans on wildlife and ecosystems in North America. Following European colonization, the impact of people on the environment changed dramatically. Forests, grasslands, water, minerals, and wildlife were viewed by early European settlers as unlimited natural resources, subject largely to unregulated exploitation. Between the mid-1600s and late 1800s, the landscape was fundamentally changed, and many wildlife species were greatly reduced or extirpated through a

combination of habitat destruction; unrestricted hunting, fishing, and trapping for commerce and subsistence purposes; as well as United States' government policies to eliminate predators to protect livestock and to eliminate bison as a means to subjugate certain Native American tribes.

In the late 1800s, influential individuals including Theodore Roosevelt, Gifford Pinchot, George Bird Grinnell, and Harriet Hemenway raised awareness about the decimation of wildlife and championed limiting the exploitation of natural resources to sustainable levels. These efforts initiated the modern conservation movement in North America.

At the outset, conservation focused on protecting remaining fish and wildlife populations from overuse by market hunting and commercial fishing and protecting habitat from development. Laws were passed by state and federal governments in the late 1800s and early 1900s restricting killing of many species, and officers were hired to enforce the laws. Many of today's state wildlife agencies originated with the establishment of these law enforcement entities.

As species began to recover, early wildlife scientists added their expertise to the conservation movement. Techniques were developed to monitor populations, estimate sustainable harvest levels, restore habitat, and successfully restore species to former parts of their range. By the 1930s fish and wildlife management were increasingly supported by science.

As wildlife populations increased and more people began to engage in recreational hunting and fishing, competing interests turned to elected officials in governor's offices and state legislatures to influence the allocation of wildlife benefits. This resulted in decision-making that was often dominated by powerful special interests.

In the early 1930s, the International Association of Game, Fish, and Conservation Commissioners (the forerunner to AFWA), developed the Model Game Law as a way to moderate the influence of partisan politics on wildlife policy and allow for more deliberative decision-making related to complex fish and wildlife management issues. The model law called for creation of citizen Commissions with power over wildlife agency policies and regulations, budgets, and selection of a chief administrator who would be responsible for carrying out the policies and programs of the agency. These Commissions, composed of dedicated citizens, would serve as trustees for fish and wildlife resources.

The model law viewed citizen Commissions as a way to: 1) reduce undue intrusion of politics into agency and wildlife management; 2) ensure public engagement in establishing policies and regulations; 3) provide opportunities for sustainable use and stewardship of resources; and 4) ensure ethical and prudent operation of wildlife agencies. These purposes continue to define the vital role Commissions have in today's wildlife conservation.

Though never simple, the job of wildlife Commissions has become increasingly challenging over the past few decades. Human population growth and increasing demands for energy, food, water, and space have impacted wildlife habitats along with species' distribution and abundance. The interests and concerns of citizens with respect to wildlife have become more diverse and, in many cases, more polarized. Technology has affected how people interact with wildlife and with each other. Social media has transformed the way people communicate, connect, and organize around issues in an effort to influence decision-making.

At the same time, Commissions now have access to more and better scientific data and information than ever before. Advances in both biological and social sciences enable agencies to provide better decision support and recommendations for management. Technology also offers new ways Commission members can engage with their publics more efficiently.

Commissions continue to perform a central role in wildlife governance. To fulfill that role, as trustees, Commission members need to listen to all citizens; consider the long-term impacts of their decisions; demand agency staff provide comprehensive and objective information, analysis, and recommendations; and allocate benefits equitably.

The North American Model of Wildlife Conservation

A review of some of the laws and policies that played a role in the conservation of wildlife in North America in the first half of the 20th Century identified seven tenets that have come to be referred to as the North American Model of Wildlife Conservation (NAMWC). For more on the NAMWC see: [The North American Model of Wildlife Conservation: Origins, Meaning, and Purpose - YouTube](#) (min 2:23 – 34:21). The tenets are:

- Wildlife resources are a public trust
- Markets for game are eliminated
- Allocation of wildlife is by law
- Wildlife can only be killed for legitimate purposes
- Wildlife is considered an international resource
- Science is the proper tool to discharge wildlife policy
- Democracy of hunting is standard.

Although the list of tenets was not meant to be all encompassing, and the authors of the papers that led to the NAMWC did not intend for their retrospective analysis to be used as the template for conservation going forward, some people and interest groups have elevated the NAMWC to near-sacred status. At the same time, others have criticized the NAMWC as ignoring important elements of conservation history, such as habitat protection and the role of indigenous culture, being overly focused on hunted wildlife, or failing to address how regulated commercial use of fish and furbearers has contributed to conservation.

Debate regarding the substance of the NAMWC and its usefulness as guidance for future wildlife conservation is ongoing. Some of the tenets, such as considering wildlife a public trust, allocation of wildlife by law, and considering wildlife an international resource is generally accepted. However, other tenets offer little guidance for decision makers, including Commissions. For example, the tenet that wildlife can only be killed for legitimate purposes leaves open the question, “What are legitimate purposes?” For some people, shooting prairie dogs for sport or contests based on killing the most coyotes are legitimate. For others, such practices are not. As discussed in detail in the section of the guidebook on The Role of the Commission, wildlife governance principles based on public trust thinking and good governance norms provide more complete guidance for Commission decision making than the NAMWC.

Contemporary Trends in Conservation

The job of conserving fish, wildlife and habitat has become increasingly complex with changing demographics; shifts in people’s wildlife orientation values; increased public expectation of and participation in decision making; increased demands on wildlife agencies; emerging conservation issues; and generally, insufficient resources. The increasingly polarized nature of public policy debate is an additional factor Commissions face.

Changing Wildlife Values

Many state agencies are increasing the use and application of social science (including increased public engagement) to better understand their publics’ interests and concerns about fish and wildlife conservation. This shift reflects the reality that while the biology and ecology of wildlife determine what management decisions are sustainable, peoples’ values determine which management decisions are appropriate.

In a 2015 project at Colorado State University, researchers developed a framework for understanding human values towards wildlife. They classified people into 4 categories that represent their beliefs or values about social affiliation, caring, hunting and use of wildlife. These wildlife value orientations include:

- Traditionalists who believe wildlife should be used and managed for human benefit
- Mutualists who believe wildlife are part of our social network and that we should live in harmony with wildlife
- Pluralists who demonstrate both traditionalist and mutualist values to varying degrees depending on the specific context
- Distanced individuals who often believe that wildlife-related are less salient to them

The researchers found that over time, the proportion of the population with traditionalist wildlife values is declining, particularly in western states. The authors attribute this shift to modernization (e.g., increased wealth, education, and urbanization) and project that the proportion of mutualists and pluralists will continue to grow.

Understanding people's wildlife-oriented values and how they are changing can help agencies and Commission members predict how the public may react to proposed policy or regulations. For more information about the wildlife value orientations in your state see:

<https://sites.warnercnr.colostate.edu/wildlifevalues/results/>

Many state fish and wildlife agencies are struggling to understand and adapt to the changing interests and concerns of the North American public about fish and wildlife conservation. To address this challenge, AFWA and WMI worked with over 60 wildlife professionals to develop the Fish and Wildlife Relevancy Roadmap (<https://www.fishwildlife.org/afwa-informs/resources/blue-ribbon-panel/relevancy-roadmap>).

Endorsed by AFWA directors in 2019, the Relevancy Roadmap is a practical guide that offers more than 100 recommendations state and provincial fish and wildlife agencies can use to engage and serve broader constituencies. Commissions can, and should, play an important role in efforts to overcome barriers to improved public engagement and enhanced conservation outcomes.

Changing Demands on State Agencies

When most conservation agencies and Commissions were formed, their focus was primarily on resource protection through law enforcement and the restoration of natural resources from unregulated use. The agencies conducted basic research on ecology and the biology and life history of recreationally or commercially important fish and wildlife. There are many successes to be celebrated on the restoration of many species and habitats including deer, turkey, beavers, and watersheds important for fisheries. Changing interests and concerns of Americans relative to fish, wildlife, habitat, and the environment in general, have caused state conservation agencies to modernize and expand their attention and activities to a broader suite of species, habitats, and conservation-related issues.

Commissions and agencies are now being held to a greater level of public and legislative accountability than ever before for agency performance, organizational effectiveness, ethical behavior and return on investment. This is paralleled with an overall national trend toward greater accountability of government and is fueled and supported by increased media attention. A scarcity of funds has resulted in a greater need for collaboration, partnerships, and innovation. To meet these needs, agencies and their Commissions are doing more to increase their effectiveness

and produce increased conservation benefits. States are facing numerous and complex conservation issues. Some of these include:

- Demands from a broader range of citizens whose interests and concerns about wildlife management differ from those previously engaged with the agency
- Increased co-management of natural resources with tribal governments
- People's concerns about the welfare of individual animals versus animal populations
- Concerns about private property rights and access to public lands
- Increase in negative human-wildlife interactions
- Exotic or nonnative species impacting native species and ecosystems
- Water quality and quantity
- Illegal wildlife trafficking (international and in US)
- Increased interest in operational-level agency management actions
- Continued decrease in trust in government and science
- Conservation issues are now global issues
- Increased human development impacting fish and wildlife habitat
- Decrease in the public's ability to handle nuisance wildlife issues
- Generally decreasing or static staffing of state agencies
- Limited funding for agencies to meet increased public demands and expectations
- Decrease in traditional outdoor recreation; increase in non-traditional outdoor recreation
- Implications of decreasing tenure of agency directors
- Increased agency response to natural disasters
- Increased drug interdictions or public protection details with partner law enforcement organizations
- Increase in detection, monitoring, research, and eradication of wildlife diseases
- Monitoring and mitigating impacts of climate change
- Increased participation in shooting sports
- Increased expectations of large landscape-level collaboration
- Increased focus on nongame and Species of Greatest Conservation Need (State Wildlife Action Plans)
- Increased attention to diversity, equity, inclusion, and environmental justice issues
- Increased expectation to partner with environmental and public health officials (e.g., One Health – a collaborative, transdisciplinary approach to achieve optimal health outcomes recognizing the interconnection between people, animals, plants and their shared environment)
- Increased activism to broaden Commissions composition and improve Commission and agency governance practices

Role of the Commission

The primary role of the Commission is to serve as the trustee of the public's resources. To fulfill its public trust responsibilities, each Commission must consider the interests of all people of the state and act in the best interest of all, including current and future generations, without undue preference for any particular group, interest, or geographical area. As the trustee, the Commission must simultaneously conserve the state's wildlife resources and provide benefits to the people of the state from those resources. Commission decisions about conservation and management of natural resources should not be influenced by political motivations, short-term thinking, or special interests.

In addition to managing the public trust resources of a state, the Commission has an important role in managing the public's trust in the state conservation agency. In a time when public trust in government in general is low, Commissions can help maintain or enhance trust in their state agency by being open and transparent, encouraging public participation in decision-making, being inclusive and equitable, consensus-oriented, responsive to citizen's interests and concerns, and accountable for their decisions. Public trust in a Commission and agency is a valuable asset. With it, much is possible; without it, conservation is much more difficult. Public trust is easy to lose and hard to regain.

Composition of the Commission

The composition of most Commissions is established in state statute.³ The size of the Commission, length of terms, and personal requirements for Commission members vary among the states. In most states, Commission members are appointed by the governor and confirmed by the legislature for staggered terms. Although some states select Commission members based on geographic areas or require that some Commission members have a certain background – for example be a farmer or rancher – it is important for Commission members to remember that they serve as trustees of the state's wildlife for the benefit of all people of the state.

Authorities, and Responsibilities

Commission authorities and responsibilities in most states are also established in statute and vary widely from state to state. Most Commissions have authority for regulating hunting, fishing, trapping, and other recreational or commercial uses of wildlife or agency-owned lands. In some states, the Commission has authority to approve the budget and in some states the Commission hires and supervises the agency director. In other states, the director is appointed by the higher-level official in a natural resource agency or by the governor. In all cases, it is important for Commission members to respect the role of the director in supervising agency staff and the implementation of Commission policies. Table 1. provides examples of how authorities for

³ In a few states, the commission is established and empowered by the state constitution.

various functions are distributed across all 50 states. Commission members and the director may want to review this table with respect to their respective authorities.

Table 1. Potential authorities of the legislature, governor, Commission, director, or staff for various decisions.

Authorities	Leg/Governor	Commission	Director	Staff
Who hires the agency director?				
Who hires agency staff?				
Who develops the agency budget?				
Who approves the final agency budget?				
Who has authority to set regulations (e.g., season, harvest limit, method of take)?				
Who has authority to set fees and penalties?				
Who determines number of agency full-time staff?				
Who sets number and location of Commission/Board meetings?				
Who determines Commission agenda items?				
Who receives, investigates, and resolves complaints?				
Who establishes advisory groups?				
Who sets agency priorities?				

Important questions to discuss with your agency’s director or legal staff are:

- What is the legal authority for your Commission and agency (e.g., constitution, statutory reference)?
- What do those authorities include (e.g., fish, wildlife, parks, forestry, law enforcement, plants, insects, water quality/quantity)?
- What committees or councils are Commission members expected to attend or chair, if any?
- What public events or meetings are Commission members expected to attend?
- What is the expected relationship with staff?

In addition to operating within the scope of its delegated authority, a Commission must also obey other laws related to government operations. Such laws typically address administrative procedures including requirements for open meetings and/or limiting communication among

Commissioners between meetings. Such laws vary widely. In some states, Commission members may not communicate with any other commission member outside of a public meeting. In other states, individual commission members may communicate, as long as a quorum of the Commission is not involved. Commission members should seek counsel from the agency director or legal staff on the requirements in their state.

The Commission acts at all times as a whole body and at no time can a single member or minority group of Commission members take any action to influence the operations or programs of the agency unless directed by the chair or the Commission as a whole. The public and the resource benefit when the Commission engages in a strategic partnership with the director, the agency, and public. The director's and agency's role in the partnership is to provide technical expertise and science-informed recommendations to the Commission for consideration. The public's role is to provide input on their interests and concerns about natural resource issues and the agency's management of them. The Commission's role is to provide balance to the different interests, responsibly determine policy, and formalize decisions about allocation of the resource, if any.

Commission Decision- Making Processes

While decision-making processes vary state to state, generally, regulatory, and policy-level decisions are made by a formal vote of the Commission members at a publicly noticed and open meeting. The public is usually asked to provide input into a decision in open, public meetings; through telephone, mail, or online surveys; webinars; online input gathering tools; or through focus or advisory groups. It is important for people to understand how to provide input on a proposed decision and how their input will be used with other available information.

Commission decisions are supported and constrained by information from five key sources (see Figure 1). Biological/ecological information identifies what management options are sustainable for species and ecosystems. Technical feasibility informs the Commission about what the agency is physically capable of doing. Economic feasibility informs the Commission about what the agency can afford to do. Legal mandates set limits or provide direction from the legislature regarding what the Commission can, or cannot, do. Finally, social values influence which decisions are acceptable to the public.

Figure 1. Factors that influence Commission decision-making.



How a Commission conducts its business can be as important to maintaining the public’s trust in the Commission and agency as the outcome of its decisions. Research has clearly shown that citizens’ trust in natural resource agencies, and hence Commissions, is strongly related to the degree to which they believed the agency treated them fairly, whether they agreed with a decision or not. For more information, see:

<https://www.frontiersin.org/articles/10.3389/fcomm.2020.00009/full>.

Wildlife Governance Principles formulated by Decker et al. (2016)

<https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/conl.12211>.

provide useful guidance for Commissions to fulfill their role in ways that promote public trust.

Commission decision-making should:

- Consider the interests of all those who benefit from wildlife, both now and into the future.
- Consider all citizens’ values and interests by seeking, listening, and responding to different perspectives.
- Use social and ecological science, citizens’ knowledge, and the wisdom of staff and Commissioners.
- Provide diverse benefits for current and future generations, while avoiding privileging some citizen’s desires over others.
- Ensure Commissioners and agency staff are responsible for maintaining or enhancing the benefits wildlife provide and making sure all citizens have an opportunity to experience those benefits.

- Hold Commissioners and staff responsible for making decisions in a manner that is open and transparent.
- Ensure that Commissioners and staff are publicly accountable.
- Include means for citizens to become informed and engaged in decision-making.
- Include opportunities for Commissioners and staff to meet their obligations in partnership with others.
- Facilitate collaboration and coordination across ecological, jurisdictional, and ownership boundaries.

By applying these principles to its work, a Commission can make informed decisions and increase the degree to which the public and agency understand the basis for the decision. This will result in better conservation outcomes and a higher degree of public trust in the Commission and agency.

Role of a Commission Member

Responsibilities and Attributes

Every Commission member is a trustee of the state's wildlife resources. In that role, each Commission member has an obligation to make decisions that are in the best interest of the people of the state, including both current and future generations.

The specific duties of Commissioners vary from state to state, but typically Commission members are charged with ensuring that fish, wildlife, and habitat are protected, preserved, enhanced, and managed for the use, benefit, and enjoyment of the people. A Commission member is not expected to become an expert on everything but is expected to wisely use the information provided by the agency and from outside sources such as stakeholders, universities, and private subject matter experts in the decision-making process. Responsibilities generally include:

- Supporting the agency's mission and legal mandate
- Complying with Commission authorities, policies, and open meeting laws
- Understanding the decision-making processes of the Commission and the agency
- Reviewing background materials provided in advance and coming prepared to meetings
- Actively participating in Commission meetings
- Listening to and considering the perspectives of all citizens who provide input and those of fellow Commissioners
- Fully considering the ecological, social, ethical, economic, and political science information provided by staff and others
- Making thoughtful, informed decisions, focusing on the short and long-term common good

Each Commission member brings a unique set of skills, life experiences and knowledge to the Commission table. To be most effective, a Commission member must work in collaboration with his/her fellow members, the director and agency staff to fully understand the issues brought to the Commission for decisions, actively listen to public input and consider the long-term impacts of each decision. Attributes that contribute to a Commission member's success include:

- Seek as much information as possible to make informed decisions; be adaptable when presented with new information
- Weigh information carefully; don't just listen to the loudest voices in the room
- Be objective; put personal biases aside
- Be respectful of staff time, expertise, responsibilities, and perspectives
- Be respectful of stakeholder's time, expertise, and perspectives; be empathetic of their concerns

Every state has different natural resource issues, goals, and constituents; therefore, each Commission member's experience during their term will be unique. That said, discussions with former and current Commission members have revealed some common experiences. Commission service can be a rewarding as well as a time-consuming endeavor. The calls, letters, and emails from stakeholders and time spent with subject matter experts to better understand issues can create pressure on professional duties, careers, family, and personal interests.

Commission members can expect to hear passionate arguments from people with very different opinions on issues that come before the Commission, particularly in regard to controversial topics. The emotion evident in public input is not a bad thing; it shows that people care deeply about wildlife and how it is treated and used. Without that level of public interest in wildlife, there would be less support for its conservation.

Role of Stakeholders

Role of Stakeholders in Conservation

Natural resource management has long been depicted as focusing on three interacting components: wildlife populations, wildlife habitats and humans. Modern natural resource management by state agencies is increasingly complex and requires understanding of the interests and concerns of its stakeholders. The terms stakeholder, public trust beneficiary and constituent are used somewhat interchangeably. Stakeholders is a term most often encountered in fish and wildlife agencies and Commissions and is someone or a group of people that are significantly affected by wildlife or significantly affect wildlife or wildlife management decisions or actions.

Under the public trust framework of wildlife conservation, all people receive benefits from the conservation of wildlife whether they participate in wildlife-related activities (e.g., restoration and conservation of habitat for wildlife contributes to clean air and water; whitetail deer management may decrease deer-vehicle collisions). A constituent is a person who authorizes another to act in his or her behalf, such a voter in a district represented by an elected or appointed official. The authors of the Fish and Wildlife Relevancy Roadmap refer to broader constituencies as people who are not currently engaged in a meaningful way in conservation or with a conservation agency.

Stakeholder input informs the agency and Commission about evolving social values and expectations relative to natural resource management. Stakeholder engagement is essential to the fulfillment of the state's public trust obligation. Stakeholders are central to why natural resource management occurs and how it is conducted.

New stakeholders may arise from the consequences of Commission decisions or policies. People may be activated if they are impacted by something they have not previously experienced (e.g., smoke from a prescribed fire, overabundant species such as deer or Canada geese). Differences of opinion may arise between these groups and increase conflict. Gathering input from the public can inform Commission members and the agency as to the degree of support or opposition to a proposed management decision.

Natural resources are a public trust, conserved and managed by states for the benefit of all people. That means all people have an interest in how they are managed and should be provided the opportunity to provide input into those decisions. Social science inquiry and effective stakeholder engagement provide the insight for agencies to understand the interests and concerns of the public relative wildlife and how they change over time. These include:

- Identifying all significant kinds of stakeholders and considering them equitably
- Evaluating the distributions of costs and benefits of management in relation to different stakeholders
- Incorporating the information about stakeholder interests and concerns into decision-making and management practices
- Evaluating the outcomes of management actions

Under the public trust framework, state conservation agencies are expected to produce benefits for society (i.e., positive impacts created or negative impacts reduced) that are experienced directly or indirectly by citizens as a result of management. Social science inquiry and stakeholder engagement help agencies improve understanding of 1) how people value wildlife; 2) what benefits people desire from wildlife management; 3) people's acceptability of management practices; and 4) how stakeholders affect or are affected by wildlife or wildlife management.

Methods of Public Engagement

There are many methods of gathering input from the public:

- Telephone, mail, or online surveys
- Focus groups
- Informal or unstructured communications
- Unsolicited communications
- Planned public activities (e.g., display/table at a fishing event)
- Stakeholder groups (but remember that the head of the group may not fully represent all the perspectives of the group)
- Task force or advisory panel
- “Round table” discussions
- Public comment or testimony at a Commission meeting
- Letters
- Webinars
- Online meetings (e.g., Zoom™, TEAMS™, WebEx™)
- Online commenting tools
- Conference calls
- In-person listening sessions
- Topic-specific workshops

The agency and Commission should support the use of as many as possible to ensure the interests and concerns of all are heard and that the methods used are easily accessible to people. There are pros and cons to each. Methods of gathering input are continually evolving with changing technologies and methods should be periodically evaluated for their effectiveness. While Commission members may be invited to participate in public engagement activities, they need to remember they are representing the Commission, not their personal interests.

The effectiveness of an agency’s public input gathering processes (and analysis of that input) can have a significant impact on the agency’s credibility and the public’s trust in the agency and Commission, its decision-making processes and in the quality and durability of its decisions. Social science research and stakeholder engagement can be as time consuming and costly as ecological/biological research. It is also of equal value to biological information, particularly for controversial management decisions.

The Commission should consider the following questions regarding public participation:

- How does the agency gather and analyze public input?
- When in the decision-making process is public input gathered?

- What is the agency's capacity to gather public input?
- How is public input balanced with the socio-ecological data in the decision process?
- How can the Commission help the public feel that their input is respected, valued and meaningful?
- How do the values expressed in communications to the Commission align with the agency mission and state residents' values?

Working with the Agency

Working with the Director

A successful Commission/director relationship is a partnership where both have clearly identified roles and authorities; they are aligned around the mission and mandate of the agency; have established effective communication channels; and are adaptive when presented with new information. The Commission needs to respect the authority and responsibilities of the director – especially when it comes to internal policies, procedures, and actions. The Commission may delegate some decisions to the director as appropriate (e.g., emergency closure of access to a property or species harvest due to a natural disaster). The director is typically the executive authority to ensure that Commission decisions are implemented and to keep the Commission apprised of agency activity, current and emerging issues that may impact the natural trust resources, the agency or the Commission. The director, with guidance from the Commission, typically builds Commission meetings agendas that are based on the natural resource needs and public input. Generally, the Commission has oversight only on the director. The director hires the agency staff, defines their priorities and responsibilities, and is held accountable for their actions. A publicly reviewed and written document defining the roles and responsibilities of the Commission and the agency director has proven to be helpful for reducing misunderstanding and conflict.

Working with Staff

The role of agency staff is to provide the technical knowledge, expertise, wisdom and to develop sound recommendations or alternatives for the Commission to consider. Commission members should discuss the agency norms for communication and interactions between themselves and staff with the director. Some directors encourage Commission members to reach out to staff directly if they need information; other directors prefer to have communication flow through them or their senior staff.

Commission members should respect the time, responsibilities, and expertise of the agency staff. Some natural resource issues may require months or years of research and monitoring to gather

the data necessary to craft a defensible science-informed recommendation. Sometimes new technologies or basic research may need to be developed and conducted to define a natural resource issue – especially with newly emerging issues like Chronic Wasting Disease, the impact of an invasive species, or significant loss of habitat. Staff may be delegated to make operational-level decisions by the director, but policy and regulatory-level decisions are generally the purview of the Commission.

Working in the Public Sector

Many Commission members come from the private sector and find that working within a government framework can be complex, slow, and frustrating. Although a solution to a problem may seem obvious to you as a Commission member, state or federal laws, budget availability, agency requirements, or governmental processes can prolong decision-making related to that solution. Commission members should consult their agency director to develop an understanding of the administrative requirements for decision making and realistic expectations about how quickly decisions can be made in their state.

Another difference between working in the private and public sectors are “sunshine” or open meeting laws that are common across the country but vary state to state. The purpose of these laws is to ensure the business of government is conducted in a manner open to public scrutiny and to prevent public bodies from making decisions in secret. In addition to requiring open meetings, these laws usually regulate communication both in-person and by electronic means (email, text, Zoom™ meeting, etc.) between Commission members. Commission members should consult their agency director or legal staff to develop an understanding of their state’s requirements.

Working with Elected Officials

In general, Commissions have the role of formulating policy and promulgating rules for fish, wildlife and habitat management and outdoor recreation activities under their jurisdiction. This role is guided by the agency mission and various documents such as an agency strategic plan. Achieving the agency mission and goals often requires political involvement by the Commission. Commission members and staff may work collaboratively to develop legislative agendas or plans for passage of favorable legislation or acquire funds or other resources. Commission members can contribute valuable skills and resources in the political environment and the effective and appropriate advocacy and actions of Commission members have often been vital to the success of the agency. Generally, the agency director or designees have the primary responsibility for communicating with the appropriate House and Senate committees, but Commission members can advocate informally or formally through their contacts. Throughout the legislative advocacy process the Commission members should be careful to not make any commitments for actions of

the Commission that are not consistent with existing statutes, policies, and previously approved board actions. Legislative advocacy should be closely coordinated with the agency director.

Commissions were generally formed to reduce the impact of partisan politics on wildlife management. But it is important to understand the power dynamics, relationships and formal authorities between the Commission, Commission members, agency directors and elected or appointed officials (e.g., when the governor weighs in on regulatory or policy issue). Most Commissions operate under delegated authority from their state legislature. It is important to recognize and respect the ability of the legislature (or the citizens in states that provide for initiatives) to overturn a decision made by the Commission or even alter Commission authorities if they so choose.

Working with the Media

The Commission or the Commission members may be expected or required to interact with the media, although this will vary from state to state. Some may want just the Commission chair to speak to the media, others may have the agency's communications office as the conduit to the media. The media can be a powerful tool to inform stakeholders and the public about Commission and agency actions and accomplishments. The media can be an equally powerful source of misinformation in the absence of a constructive working relationship.

Agencies should consider formal media training for Commission members and staff which can go a long way toward ensuring the media has access to timely, accurate information and plays a positive role in conservation. Here are a few tips about working with the media:

- Assume that nothing is “off the record”
- Assume everything is being recorded
- Be as brief and clear as possible (TV sound bites average 4 seconds)
- Stick to the topic
- Don't offer personal opinions; represent the Commission's decisions
- Avoid saying, “No comment.” If you do not know the answer to a question, offer to connect the interviewer with someone who does, or offer to get back to them later.
- Communicate with the director about which topics should not be discussed with the media (e.g., ongoing enforcement case, legal or personnel matters, draft policies, budget)

Additional Resources

Common Programs in State Wildlife Agencies

Each wildlife agency is organized to best address its state's social and ecological context. Not every agency will have the capacity or need to have all of these programs. Some of these program activities may be acquired through contracts with academia (e.g., USGS Cooperative Research Units), the private sector, non-governmental organizations, or partner agencies.

Typical agency programs include:

Wildlife Management	Fisheries Management
Nongame Management	Habitat Management
Law Enforcement	Licensing and Permitting
Social Science (Human Dimensions)	Research
Geographic Information Systems (GIS)	Data Management
Information Technology	Boating and Waterways
Parks	Forestry
Water quality	Soils and Minerals Management
Outdoor Recreation	Recruitment, Retention and Reactivation
Legislative/Government Affairs	Budget/Finance
Human Resources	Legal

Tips for Holding Effective Online Meetings

Since the COVID-19 pandemic, many state conservation agencies have turned to online meeting platforms to conduct the business of conservation. These include Zoom™, GotoMeeting™, Skype™, WebEx™, or Teams™. Online meetings range from a few colleagues internally to nationally held conferences with thousands in attendance. Agencies have also shifted some of their public meetings to an online format – including advisory group meetings, information gathering meetings like focus groups, and regulatory decision-making meetings such as regularly scheduled Commission or board meetings. It's likely that virtual or remote meetings may attract more attendance and engagement of more diverse stakeholders. Agencies and Commissions should consider this as an opportunity to reach new audiences on conservation topics. Here are some tips to remember about hosting online meetings.

- Continue to follow open meeting laws (consider disabling chat feature as this is part of public record)
- Continue to follow ADA and Title VI guidelines (e.g., closed captioning, American sign language translation, second language interpreters)
- Provide call-in options for participants without video access
- Post communication about meeting on website and other social media accounts
- Allow for different types of public engagement (in-person, virtual (video or conference call))
- Use skilled information technology staff and advanced virtual meeting platforms that are widely available and appropriate for meeting type, location, and accessibility

- Have a plan for the unexpected (e.g., disruption of internet service)
- Manage remote participant input using secure technologies (password protected access to invited participants only (e.g., 1 password per IP address), monitor phone access line, disable platform features for people other than the host, have designated facilitator for remote participants)
- Practice before going “live” (check microphones, speakers, cameras, backgrounds, background noise/feedback, lighting, practice hand-offs between speakers, practice muting, raising hands, chat, or other features, establish norms while on camera (eating, children, pets, etc.))
- Establish remote meeting norms as you would for in-person meetings (time limitations for speakers, no inappropriate remarks, mute/unmute, cameras on/off, silence other devices (computer, phone notifications), Commission designee will acknowledge speakers one at a time, speakers introduce themselves, etc.)
- Assume participants don’t know how to use your meeting platform; provide very clear instructions about how to join and participate and have a “trouble-shooter” on hand to work out individual issues
- Expect more attendance than at an in-person meeting
- Display visual content that is accessible to in-person and remote participants; if using slides, display with a phone number on each slide for remote participants to call if there are technical difficulties
- If using a hybrid meeting (both in-person and remote), make sure both groups get to participate equitably
- Respect the queue – limit time each person can speak, announce next few speakers in advance so they can be prepared (e.g., turn TV or other device volume down to prevent feedback)
- Stick to the published agenda as closely as possible to allow for remote participants to plan on when to join
- Consider that some population segments may have technology accessibility issues (e.g., adequate internet bandwidth)
- Provide access after the meeting (e.g., notes or recording of meeting)
- Ask for feedback on meeting performance from attendees

Tips to Creating a State-specific Commissioner Orientation Guide

Based on a review of available state-specific Commission orientation documents and interviews with select agency directors and Commission members, the following elements might be included to give new Commission members a good overview of their roles and responsibilities specific to their agency and information about their agency:

- Agency purpose, mission, and vision statements

- Formal (constitutional, statutory, or regulatory) mandates which provide the Commissions and agency's authorities and responsibilities
- Formal authorities of agency director
- Link to current strategic plan
- Commission make-up (appointments, terms in office, Commission member representation, bios etc.)
- The business of the Commission (Commission meeting calendar, Commission meeting procedures, committee assignments (if any), outline of rule-making process/timeline, Commission meeting agenda template, selection and duties of Chair and Vice Chair)
- Commission meeting travel info (policies, reimbursement, etc.)
- Expectations of the individual Commission members
- Agency organizational chart
- Fact sheet about agency (e.g., # of staff, # of facilities, acres managed, species managed, estimated economic benefits realized, # licenses sold)
- Agency history
- Norms of how the agency works
- Link to agency program overview document or annual report
- Map of state with districts or regions and major agency facilities
- Map of agency owned/leased lands
- List of physical assets (emphasizes magnitude of agency responsibilities)
- Contact info for key agency staff
- Info on state-specific endowment funds or foundations and relationship with agency
- State-specific conflict of interest laws
- Fiduciary responsibilities of Commission and agency
- Open meeting laws
- Use of agency logo, clothing, etc.
- Latest fiscal year revenues and expenses
- Current fee schedule
- Link to agency policies
- Link to find news releases or articles about agency
- List of acronyms (sister agencies, funds, organizations, programs, etc.)
- Timeline and schedule for review and updating of governance manual/guidebook

Primer on Robert's Rules of Order

Deliberations at most Commission or board meetings where regulatory or policy decisions are made follow some version of Roberts' Rules of Order. In general, this process is a set of rules for conduct at meetings that allows everyone to be heard and to make decisions without confusion. The process typically includes the following steps:

- Presentation by a staff member, Commission member, director, or member of the public on a specific issue on which the Commission or board is being asked to act. The presentation may include recommendations based on ecological or biological research data, professional expertise and judgment, social science, stakeholder engagement data, and local knowledge and judgment
- Clarifying questions asked by the Commission members
- Public input is received – can be in-person or virtual. Often speakers have a time limit (e.g., several minutes) to ensure all have the opportunity to provide input. Input is limited only to the topic being discussed.
- A member of the Commission makes a motion (e.g., concise and on topic – “I move to support the recommendation of changing the harvest limit of 3 to 2”)
- Chair asks for a second motion to initiate formal discussion of the motion
- The Commission has the opportunity to discuss the topic
- Chair asks for amendment(s)
- Chair asks for a second motion based on amendments (if any)
- Commission members discuss and vote on amendments (if any)
- Chair asks the Commission members if there any further questions or comments from Commission members
- Chair calls for a voice or roll-call vote on the motion and announces outcome
- Each motion must be disposed of (passed, defeated, or postponed (e.g., if more information is needed))

Conservation Funding

License and Permit Revenue

All state fish and wildlife agencies depend on license and permit revenue to maintain wildlife conservation activities within their state. These funds are also used to obtain federal funds through the US Fish and Wildlife Service’s Wildlife and Sport Fish Restoration Program (WSFR). The use of these funds is restricted to wildlife conservation activities defined by the WSFR legislation and its attendant regulations. States must assent to protecting license revenue against other uses. There have been numerous attempts by governors and state legislatures to use license fees for other purposes. Such a diversion of these funds by a state will result in the loss of federal funding. In addition, state agencies may also receive fines and restitution funds resulting from conservation law enforcement actions.

State Wildlife Grants

The U.S. Fish and Wildlife Service provides funding for state agencies that have an approved State Wildlife Action Plan. These funds are appropriated by Congress to address conservation needs of species that are not hunted or fished. State Wildlife Action Plans were developed through a public process and focus on species in greatest need of conservation. These funds can

be used for research, fish and wildlife surveys, species restoration, habitat management, and monitoring.

Wildlife and Sport Fish Restoration Program

State fish and wildlife agencies generally receive a significant portion of their funding through grants from the US Fish and Wildlife Service's Wildlife and Sport Fish Restoration Program (WSFR). This unique program is funded by excise taxes collected on firearms, ammunition, archery equipment, fishing equipment and motorboat fuel. The Pittman-Robertson (PR)–Wildlife Restoration Act was enacted in 1937 and is funded through excise taxes on firearms and, ammunition, and archery equipment. Funds are then apportioned to state conservation agencies based on land area and number of paid license holders. Funds are for projects to restore, conserve, manage and enhance wild birds and mammals and their habitat. Projects also include providing public use and access to wildlife resources, hunter education and development and management of shooting ranges.

The Dingell-Johnson (DJ)-Sport Fish Restoration Act passed in 1950 and is funded from excise taxes on fishing equipment, motorboat and small engine fuels. These funds are apportioned to conservation agencies based on a formula which includes land area and number of paid license holders. Funds are for fishery projects, boating access and aquatic education.

The WSFR program provides reimbursement up to 75% of total project costs with the state agency required to match the remaining 25%. Sport Fish Restoration funds are allocated to marine and freshwater projects according to the proportion of resident marine and freshwater anglers in the state (if applicable). For more detailed information on USFWS funding for conservation see: <https://www.fws.gov/program/wildlife-and-sport-fish-restoration>.

Other Funding Sources

Each state conservation agency has a different model of how it's funded. While all states receive hunting and fishing license dollars and matching WSFR funding, a few receive general state tax revenue; many states have specialty license plates that fund the agency or specific programs; several states receive a percentage of lottery ticket sales proceeds; some provide the opportunity to donate when buying a license ("check-offs"); some states receive a small percentage from vehicle speeding fines; many states have a separately governed conservation foundation that solicit donations and provide funding to agency programs; private foundations offer conservation-related grants to state agencies; and a few states receive a small percentage of state sales tax.

Key federal legislation that intersects with state agency authority and roles

Endangered Species Act (ESA): Enacted in 1973 the ESA provides programs for the conservation of threatened and endangered plants and animals and the habitats in which they are found. The lead federal agencies implementing the ESA are The US Fish and Wildlife Service (USFWS) in the Dept of Interior and the US National Oceanic and Atmospheric Administration (NOAA) in the Dept of Commerce. The ESA constrains Commission's management of these species. <https://www.fws.gov/law/endangered-species-act>

Migratory Bird Treaty Act (MBTA): Enacted in 1918, the MBTA ensures the sustainability of populations of all protected migratory bird species. The MBTA limits the harvest of certain migratory bird species. <https://www.fws.gov/law/migratory-bird-treaty-act-1918>

Marine Mammal Protection Act (MMPA): The MMPA, enacted in 1972, prohibits the harvest or harming of marine mammals, including whales, dolphins, porpoises, sea otter, sea lions, walrus, polar bear, dugong, and manatee except by Alaska Natives and certain American Indian Tribes. <https://www.fws.gov/law/marine-mammal-protection-act#:~:text=The%20Marine%20Mammal%20Protection%20Act,bear%2C%20dugong%2C%20and%20manatee.>

The Magnuson–Stevens Fishery Conservation and Management Act (MSA): The MSA, enacted in 1976, governs recreational and commercial marine fisheries in U.S. federal waters. <https://www.fisheries.noaa.gov/topic/laws-policies#magnuson-stevens-act>

Sikes Act: Enacted in 1960, provides programs for the conservation and rehabilitation of natural resources on military installations. https://www.fedcenter.gov/Articles/index.cfm?id=2445&pge_prg_id=21244&pge_id=1938

Lacey Act: Enacted in 1900, prohibits inter-state transport of wildlife that is illegally taken, possessed, bought, or sold.

Land and Water Conservation Fund: Established in 1964 to safeguard natural areas, water resources and cultural heritage, and to provide funding to enhance recreation opportunities to all Americans.

Great American Outdoors Act: Enacted in 2020, this act will use revenues from energy development to provide up to \$1.9 billion a year for five years to provide needed maintenance for critical facilities and infrastructure in our national parks, forests, wildlife refuges, recreation areas, and American Indian schools. It will also use royalties from offshore oil and natural gas to permanently fund the Land and Water Conservation Fund to the tune of \$900 million a year to invest in conservation and recreation opportunities across the country.

National Wildlife Refuge Improvement Act: Enacted in 1997, it provides authority, guidelines and directives for USFWS to administer national network of lands and waters for conservation,

management and restoration of fish, wildlife, plant resources and habitat and provide opportunities to participate in compatible wildlife -dependent recreation, including hunting and fishing.

Wildlife and Sport Fish Restoration (WSFR) Improvement Act: Enacted in 2000, it amends the Pittman-Robertson Wildlife Restoration Act and Dingell-Johnson Sport Fish Restoration Act to authorize spending on hunter and angler recruitment, retention and reactivation activities.

Recovering America's Wildlife Act (RAWA): For latest information, please visit <https://ournatureusa.com/>

Key wildlife professional associations

The Wildlife Society (TWS): Founded in 1937, the organization's mission is "To inspire, empower, and enable wildlife professionals to sustain wildlife populations and habitats through science-based management and conservation." TWS enhances over 11,000 members' networking and learning opportunities, professional and career development, and provides numerous ways for them to get more involved in creating a better future for wildlife and their habitats. TWS hosts a national, annual conference and many states have state-based chapters and conferences. <https://wildlife.org/about/>

American Fisheries Society (AFS): Founded in 1870, AFS is the world's oldest and largest organization dedicated to strengthening the fisheries profession, advancing fisheries science, and conserving fisheries resources. AFS has over 8,000 members around the world, including fisheries managers, biologists, professors, ecologists, aquaculturists, economists, engineers, geneticists, and social scientists. It promotes scientific research and sustainable management of fisheries resources; publishes five of the world's leading fish journals, and many renowned books; organizes scientific meetings where new results are reported and discussed; and encourages comprehensive education and professional development for fisheries professionals. <https://fisheries.org/>

Society of American Foresters: Founded in 1900, the mission of the SAF is to advance sustainable management of forest resources through science, education, and technology, promoting professional excellence while ensuring the continued health, integrity, and use of forests to benefit society in perpetuity. <https://www.eforester.org/>

Society for Range Management: Founded in 1948, the SRM believes that rangeland ecosystems should be managed to provide optimum sustained yield of tangible and intangible products and benefits for human welfare. This can only be achieved through the sound use of ecological and economic principles. The use of valid resource inventories and monitoring are a basic requirement for planning and management of rangeland resources. Other manipulative

management practices, including fire and integrated pest management may be employed to create positive changes in the landscape through development of sustainable, desired plant communities. <https://rangelands.org/>

Society for Conservation Biology (SCB): Founded in 1985, with more than 4,000 members, SCB serves as an international membership society for professionals, students and non-profits dedicated to advancing the science and practice of conserving biodiversity. SCB priorities include advancing the application of conservation science to management, policy, and education and to facilitate the creation and dissemination of conservation science. <https://conbio.org/>

Key conservation related journals

- The Wildlife Professional
- Journal of Wildlife Management
<https://wildlife.onlinelibrary.wiley.com/journal/19372817>
- Wildlife Society Bulletin
- <https://wildlife.onlinelibrary.wiley.com/journal/23285540>
- American Fisheries Society
<https://afspubs.onlinelibrary.wiley.com/journal/15488659>
- Human Dimensions of Wildlife <https://www.tandfonline.com/journals/uhdw20>
- Interdisciplinary Social Sciences Research Network
- Frontiers in Conservation <https://www.frontiersin.org/journals/conservation-science>
- Conservation Letters <https://conbio.onlinelibrary.wiley.com/journal/1755263x>
- Conservation Biology <https://conbio.onlinelibrary.wiley.com/journal/15231739>
- Conservation and Society <https://www.conservationandsociety.org.in/>
- Conservation Science and Practice
<https://conbio.onlinelibrary.wiley.com/journal/25784854>

Recruitment, Retention and Reactivation (R3)

Hunters and anglers have been a primary source of funding for state fish and wildlife agencies through license fees and an excise tax on sporting goods. Since the 1980s, participants in hunting and angling have declined, resulting in less direct funding for conservation. A national hunting and shooting sports action plan was developed in 2016 to reverse the decline in participation among hunters and target shooters. This plan and its subsequent programs have become known as recruitment, retention, and reactivation or “R3”. An inventory of current efforts was conducted, resources were reviewed and coordinated and customized tool kits for agencies were developed. Many agencies now have dedicated staff who focus programs on recruiting, retaining and reactivating hunters, target shooters and anglers. They have a strong national network,

supported by the Council to Advance Hunting and the Shooting Sports (<https://cahss.org/>) and the Wildlife Management Institute (<https://wildlifemanagement.institute/>) to test new ideas and learn from each other. They conduct and support research, hold regional and national conferences and trainings. State-based R3 programs are important to the future of conservation funding and introducing more people to hunting, shooting sports and fishing.

Conservation Partners

Federal Agencies

- US Department of Agriculture
- US Department of Commerce
- US Department of Defense
- US Department of Energy
- US Department of Interior
- US Department of Transportation

State “sister” agencies

Each state will have its unique set of “sister” agencies that may have some authority and responsibility for conservation and management of natural resources. These may include:

- Agriculture agencies
- Emergency management agencies
- Environmental resource agencies
- Forestry agencies
- Soil/mineral management districts
- State and local park agencies
- State and local police departments
- State water offices
- Transportation agencies
- Water management districts

AFWA and Regional Associations

AFWA represents North America’s fish and wildlife agencies to advance sound, science-informed management and conservation of fish and wildlife and their habitats in the public interest (<https://www.fishwildlife.org>). AFWA represents its state agency members to advance favorable fish and wildlife conservation policy and funding issues. AFWA supports work to ensure collaboration on the priority regional and national conservation issues that include birds, fish habitat, energy development, climate change, wildlife action plans, conservation education, leadership training and international relations (<https://www.fishwildlife.org/afwa-acts/committee-rosters-charges-handbook>). AFWA hosts an annual meeting in the fall that convenes wildlife professionals covering many topics of interest (<https://www.afwaannualmeeting.org/upcoming-meetings.html>). These same committees also

meet at the spring North American Wildlife and Natural Resources Conference hosted by WMI (<https://wildlifemanagement.institute/>). Many committees and sub-committees work on topical issues throughout the year collaborating across federal, state, provincial, and tribal jurisdictions.

AFWA members include state, provincial, commonwealth, territorial and federal district governmental agencies primarily responsible for administration of fish and wildlife resources; and such agencies having responsibility for management of fish and wildlife habitat on federal lands and waters in the United States, Canada, and Mexico.

There are also regional fish and wildlife associations that mirror AFWA but on a regional scale. They also hold annual meetings. Contact your agency point of contact about your state's norms for attending the national and regional association meetings.

- Western Association of Fish and Wildlife Agencies (WAFWA) <https://wafwa.org/>
- Association of Midwest Fish and Wildlife Agencies (MAFWA) <https://www.mafwa.org/>
- Northeast Association of Fish and Wildlife Agencies (NEAFWA) <https://www.neafwa.org/>
- Southeastern Association of Fish and Wildlife Agencies (SEAFWA) <https://seafwa.org/>

Outdoor Recreation Offices

To date, 16 states have created offices of outdoor recreation, task forces, or policy advisors to serve as the state lead in understanding and promoting the economic benefits of outdoor recreation activities. These include WA, OR, UT, CO, WY, MT, NC, ME, NM, MI, NV, WI, VA, NH, and MN. Several more states have informal offices or positions. These offices are sometimes in the Governor's Office, Department of Economic Development or other cabinet-level office ([State Office Outdoor Recreation – Outdoor Industry Association](#)).

Non-Governmental Conservation Organizations (NGOs)

Conservation of fish, wildlife and habitats in the US could not occur without the thousands of small and large non-governmental conservation organizations. Some are very localized "friends of" type groups to national-level organizations that advocate for the general or specific fish, wildlife, or habitat conservation. Partnering with these groups extends the resources of state conservation agencies; NGOs sometimes have the resources, expertise or governance flexibility that is not available to state agencies. While all NGO interests may not perfectly align with state conservation priorities, they play a critical role in advocating and supporting conservation. The American Wildlife Conservation Partners include many of these groups (<http://www.wildlife-partners.org>).

Select Comments from Directors and Commissioners Interviews (paraphrased)

From Directors

- Providing an orientation to new Commission members is important to establish a good relationship between the Commission member and the agency

- New Commission members coming from the private sector can be frustrated by government administrative procedures and bureaucracy
- It's good to clearly define the roles of the Commission, Directors and staff
- Workshops and field tours with staff help Commission members understand the breadth of work the agency does
- Emphasize the need for Commission members to respect the expertise of staff
- Even if they represent a particular sector in the state, it's a Commission member's responsibility is to be a trustee for the whole state
- Commission members are the "voice of the people"
- It's staff's role to keep Commission members informed on the issues (and be science informed)
- The power of the Commission's work comes from consensus
- Effective public engagement is critical to making durable decisions
- Provide Commission members why a wildlife commission appointment is different than other boards they may sit on
- Help Commission members understand scientific processes and concepts
- Emphasize need to follow our "open meetings" laws
- Help Commission members focus on big picture policy and direction, not operational day-to-day decisions

From Commission members

- Position takes more time than expected
- It's a lot of complex information to absorb
- Stay in your lane and don't try and run the shop
- Be patient with us; help us understand the science
- Help us better understand the organization, function and authority of the agency
- Bring us the pros and cons of your recommendations
- Help us know who the key players are for each issue
- Help us understand there are rarely black and white answers
- Let us know it's ok for us to ask questions of staff and the public
- Let us know where you need help (e.g., advocacy for funding or resources)

Results From Survey of Agency Directors

The Wildlife Management Institute conducted a short survey of all agency Directors between July 27 and August 15, 2022.

1. How long have you served as the state fish and wildlife agency's Director for your current state? (43 responses)

Less than 1 year	18.6% (8)
One to three years	18.6% (8)
More than three years	62.8% (27)

2. How long have you worked for your current agency? (40 responses)

Less than 1 year	2.5% (1)
1 to 3 years	7.5% (3)
4 to 10 years	30% (12)
11 to 20 years	20% (8)
21 years or more	40% (16)

3. How long have you been in the conservation field? (40 responses)

Less than 1 year	0% (0)
1 to 3 years	7.5% (3)
4 to 10 years	7.5% (3)
11 to 20 years	17.5% (7)
21 years or more	67.5% (27)

4. Does your state fish and wildlife agency provide an orientation or on-boarding process for new Commission/Board Members? (38 responses)

Yes	76.3% (29)
No	23.7% (9)

5. Which of the following topics were included in the orientation? (25 responses)

Public trust roles and responsibilities	96% (24)
Statutory/constitutional authority for Commission and agency	96% (24)
Commission meeting protocols and logistics	92% (23)
Regulation-setting process	92% (23)
Agency organization and programs	92% (23)
Public input process	88% (22)
Communicating with agency staff	84% (21)
Working with stakeholders	76% (19)
Boundaries of decision-making responsibility	72% (18)
Communicating with the media	64% (16)
Communicating with other elected or appointed officials	56% (14)
Other (please specify)	12% (3)
▪ Agency governance, Commission bylaws, etc.	
▪ Governance style, North American Model of Wildlife Conservation, critical thinking, understanding how we make decisions	
▪ Lunch menu	

6. Which parts of the orientation do you think are most helpful to them in understanding their role as a Commission/Board Member? (24 responses)

Statutory/constitutional authority for Commission and agency	83.3% (20)
Regulation-setting process	70.8% (17)
Agency organization and programs	70.8% (17)
Public trust roles and responsibilities	66.7% (16)
Public input process	66.7% (16)
Commission meeting protocols and logistics	66.7% (16)
Boundaries of decision-making responsibility	62.5% (15)
Communicating with agency staff	50% (12)
Communicating with other elected or appointed officials	37.5% (9)
Working with stakeholders	29.2% (7)
Communicating with the media	25% (6)
Other (please specify)	12.5% (3)
<ul style="list-style-type: none"> ▪ All these, and more, are important. We understand that "onboarding" is the initial step to educating a Commissioner and as such we keep the onboarding limited to a basic understanding and not violating the law. ▪ They can only absorb so much right out of the gate. The orientation lasts throughout their term with many refreshers. ▪ These are equally important and are often connected ▪ Expense reporting 	

7. Do you use the Association of Fish and Wildlife Agencies' Commission Guidebook for onboarding new Commission/Board Members? (24 responses)

Yes 12.5% (3)
 No 87.5% (21)

8. Which parts of the Commission Guidebook are most helpful? (4 responses)

The role of the Commission	100% (4)
The role of the Commissioner	75% (3)
Providing policy leadership	75% (3)
History of the Commission system	50% (2)
The Director	50% (2)
Commission operations	50% (2)
The agency	25% (1)
Monitoring agency performance	25% (1)
Outcomes	0% (0)
Working with stakeholders	0% (0)
The political arena	0% (0)
Bibliography	0% (0)
Additional resources	0% (0)

9. Does your state fish and wildlife agency provide additional or ongoing training for Commission/Board Members? (32 responses)

Yes 56.3% (18)
 No 43.8% (14)

10. Which of the following topics are covered in the training? (18 responses)

Fisheries or wildlife ecology/management principles	61.1% (11)
Good governance practices	50% (9)
Human dimensions of fish and wildlife management	27.8% (5)
Conflict resolution	0% (0)
Other (please specify)	50% (9)

- All, to some degree. Some topics are covered more formally than others and individual Commissioners take different levels of interest in different topics
- State ethics
- Infrastructure management, ethics training, hot topics
- Sustained Development of Informed Consent; communications; statistical basics (surveys, sampling, etc.); recognizing different methods of public input and what this input means.
- Interaction between agency staff and Commissioners
- Legal authority, Commission and agency roles
- Ethics training
- Workplace harassment and cyber security
- Ethics

11. What are two key pieces of advice would you provide to a new Commission/Board Member? (28 responses)

- Be committed. Attend meetings. Participate.
- Listen more than you talk, be circumspect
- The Commission has legacy. It's public trust responsibilities are an institution that transcends the terms of individual Commissioners.
- Know your role
- Honor the public process
- Don't be afraid to say "I don't know/I'll check" and refer matter to staff
- Don't be afraid to ask questions
- Understand Roles/Responsibilities versus Directors' Role/Responsibility
- Understand Role of Commissioner versus Legislature/Executive
- Talk to staff about concerns that you have/hear about from others in order to gain information
- Get to know the stakeholders and overall public/don't focus exclusively on the voices that speak the loudest
- Educate yourself on the Commission's specific legislative authority
- Educate yourself on the specific regulations over which you have authority
- Support staff and ask hard questions

- Be open and humble
- Clear communication is critical
- Understand your role as a Commissioner vs. staff member
- Be slow to speak and quick to listen
- Network with colleagues to enhance understanding of various committees and processes
- Take some time to visit parks, wildlife management areas, hatcheries and other field sites and programs managed by the agency
- Learn the extent and scope of commissioner responsibilities
- If you follow the science when making decisions you will never fail
- Listen first and learn
- Roles and responsibilities of Commissioners vs. Director
- Communicating open and transparent
- Focus decision making on what we know, not "what you hear"
- Recognize and value the technical expertise provided by agency staff
- Don't expect to know everything immediately
- Ask lots of questions
- Remember the agency often works under federal funds with specific requirements on how the funds are allowable
- Listen with a purpose vs. waiting for the opportunity to talk
- Act as a steward for the state's fish, wildlife and natural resources
- Listen
- Public trust responsibilities
- 2 ears, 1 mouth: Use in proportion during your first year
- Be aware of and open to diverse views/opinions from other stakeholders
- Learn and stay engaged. Ask if you do not understand. Understand the organization and the importance of public input in its totality
- Request AFWA staff for onboarding assistance
- When you receive inquiries about a topic, get a complaint about the Department or have a question about anything about the agency, do not hesitate to reach for answers, context, and additional background from the agency's senior leadership team.
- Study effective strategies and protocols for interacting with the public and staff
- You are the first line of defense to protect our resources
- When Commissioners have questions, talk to the Director first
- Regulatory responsibility to streamline and de-complicate regs for R3 purposes
- Board / Commission role vs. agency role
- Vote individually, govern with one voice. Be a team.
- Understand and appreciate your roles and responsibilities

- Trust the staff, they are working to provide you with the best information to make informed decisions
- Visit our properties and use them
- Be humble and open to learning
- Trust the professionals and resist leaning into personal bias
- Your primary role is setting policy and direction for the agency, the implementation of policy is the job of the director and staff
- Be adaptive
- Open meeting law knowledge
- Whenever you have a question, call me

12. Which of the following do you feel would be the most effective method of orienting or on-boarding a new Commission/Board Member in your state? (30 responses)

Guidebook and digital resources for you/designee to support your on-boarding process 60% (18)

Digital resources for Commission/Board Member (e.g., videos, links to articles) 33.3% (10)

Guidebook (hard copy or digital) for Commission/Board Member 26.7% (8)

External in-person training 26.7% (8)

Other (please specify) 16.7% (5)

- Although we provide the Guidebook as reference to all Commissioners, some choose not to use it as a resource. Others find it very useful. Some of our Commissioners are quite analog so I need to hand them something tangible, others would appreciate the digital resource and I think the digital would lend itself to a presentation to all the Commissioners.
- Our Commission is only advisory, so guidance is voluntary. Resources they can use on their own or easily digest are most helpful.
- In person, internal training sessions (current practice)
- In person discussion with Director, legal counsel and appropriate staff
- reading the minutes of a few past meetings help with understanding

13. Is there anything else you'd like us to know about your commission orientation or on-boarding process? (12 responses)

- We have multiple Commissions in our state and the on-boarding process is slightly different for each.
- The current guidebook is just too long. Filled with good stuff but too big.
- There is often limited turnover in member organizations or representatives and diversity of interests represented is more traditional in nature. Composition often does not reflect the mutualistic trend of our state population.
- We are improving this process and understand the importance of this orientation process. We conducted our first orientation this cycle and it was extremely well

received by new board members. We will incorporate AFWA's orientation guidebook in our next onboarding process and will use this information for possibilities of continuing education

- We discuss the origins/history of our agency.
- We schedule field trips to agency properties that includes on the ground orientation.
- Our initial onboarding process is fairly informal, but structured. We continue with training throughout a Commissioner's term.
- The onboarding experience should be tailored to the unique needs and culture of the agency. One size does not fit all.
- We spend 2 full days with new commissioners regarding orientation and on boarding. It is a lot to digest in a short amount of time and we expect they will need additional support including reminders on administrative issues. In addition to this, the Director has scheduled bi-weekly calls with each commissioner individually to provide them updates on issues, activities, constituent interests etc. Prior to each Commission meeting, each presenter reaches out to all Commissioners individually to make sure they understand the item and answer any questions they may have regarding the issue
- Our Commission guidebook is one part of our commission orientation. New commissioners have a half day in person orientation including an onboarding meeting with the Directors office, and then introductory sessions with our division and agency leaders to help them understand the various roles and responsibilities within/across the agency

Results From Survey of Agency Commission Members

The Wildlife Management Institute and AFWA requested that agency Directors send a similar survey to their Commission members between July 27 and August 15, 2022. The Commission member responses are below.

1. How long have you served on your state fish and wildlife agency's Board/Commission? (49 responses)

Less than 1 year	18.4% (9)
1 to 3 years	34.7% (17)
More than 3 years	47% (23)

2. Did your state fish and wildlife agency provide an orientation or on-boarding process at the beginning of your term? (48 responses)

Yes	83.3% (40)
No	16.7% (8)

3. Which of the following topics were included in the orientation? (39 responses)

Commission meeting protocols and logistics	89.7% (35)
Statutory/constitutional authority for Commission and agency	87.2% (34)
Regulation-setting process	87.2% (34)
Public trust roles and responsibilities	82% (32)
Agency organization and programs	82% (32)
Public input process	79.5% (31)
Communicating with agency staff	71.8% (28)
Boundaries of decision-making responsibility	69.2% (27)
Communicating with the media	61.5% (24)
Communicating with other elected or appointed officials	53.8% (21)
Working with stakeholders	51.3% (20)
Other (please specify)	7.7% (3)
▪ Gift Rules	
▪ A half day of department head interviews/discussions. This was very helpful in learning those individuals who are key to the department's decision-making processes, as well as, getting to know each individual on a somewhat personal basis.	
▪ Orientation is 2-3 days meetings with all Division leadership and Director Office Staff, including legal, Public Affairs and Marketing.	

4. Which parts of the orientation were most helpful to you in understanding your role? (35 responses)

Statutory/constitutional authority for Commission and agency	62.8% (22)
Public trust roles and responsibilities	60% (21)
Regulation-setting process	57.1% (20)
Commission meeting protocols and logistics	40% (14)
Communicating with agency staff	40% (14)
Public input process	31.4% (11)
Agency organization and programs	31.4% (11)
Boundaries of decision-making responsibility	31.4% (11)
Communicating with other elected or appointed officials	28.6% (10)
Communicating with the media	20% (7)
Working with stakeholders	14.3% (5)
Other (please specify)	8.6% (3)
▪ The orientation was somewhat helpful but there was/is so much more information that could facilitate the learning process. I have found participating in the Commissioners Committee sessions at WAFWA to be very helpful. I wish that there were more opportunities to connect and learn from others in similar roles.	

- Training on protocols and policies within the board (even unofficial ones) would have been helpful. The authority (and history of creation) of the board would have been extremely valuable.
- Understanding Statutes, Rules and Commission Orders was paramount for me the first couple of years.

5. Did your state fish and wildlife agency provide you a copy of the Association of Fish and Wildlife Agencies' Commission Guidebook? (42 responses)

Yes 33.3% (14)
No 66.7 % (28)

6. Which parts of the Commission Guidebook were most helpful to you in understanding your role? (13 responses)

The role of the commission	92.3% (12)
Commission operations	69.2% (9)
The role of the commissioner	61.5% (8)
History of the commission system	46.2% (6)
The agency	46.2% (6)
Providing policy leadership	38.5% (5)
The director	30.8% (4)
Working with stakeholders	23.1% (3)
The political arena	15.4% (2)
Monitoring agency performance	15.4% (2)
Bibliography	7.7% (1)
Outcomes	7.7% (1)
Additional resources	7.7% (1)

7. Does your state fish and wildlife agency provide additional or ongoing training for Commission/Board Members? (41 responses)

Yes 70.1% (29)
No 29.3% (12)

8. Which of the following topics are covered in the training? (25 responses)

Fisheries or wildlife ecology/management principles	64% (16)
Human dimensions of fish and wildlife management	52% (13)
Good governance practices	52% (13)
Conflict resolution	16% (4)
Other (please specify)	32% (8)
<ul style="list-style-type: none"> ▪ My agency now provides complete orientation. ▪ Monthly lunch and learn 	

- Current projects by the agency
- Not sure, no training received yet
- Not 100% certain, my first board meeting is 8/1/22.
- Open Meeting Laws
- Mandatory training includes: Preventing Workplace Harassment, Ethics, Conflict of Interest. All other statewide training is optional for Commissioners.
- Ethics

9. Which of the following do you feel would be the most effective method(s) of orienting or on-boarding a new Commission/Board Member in your state? (30 responses)

Guidebook and digital resources for you/designee to support your on-boarding process 63.3% (19)

External in-person training 63.3% (19)

Guidebook (hard copy or digital) for Commission/Board Member 53.3% (16)

Digital resources for Commission/Board Member (e.g., videos, links to articles) 46.7% (14)

Other (please specify) 13.3% (4)

- In person WAFWA commissioner meeting.
- Personal interaction is the best. Everyone has a different set of filters. Learning them for each board member is important. Also learning the science behind the recommendations
- One on one with commissioners, getting the general overview on different topics.
- Each Agency and Commission is different so, a guidebook created by the Agency is most applicable. External discussions during AFWA, WAFWA and other conferences are extremely valuable and allows the opportunity for Commissioners to share strategies, concepts and practices.

10. What advice would you give to a new Commission/Board Member in your state? (32 responses)

- Educate yourself on topics read all the material
- Be open to input and suggestions even from people you disagree with. Reach out to people you don't know for input.
- No one really tells you how to do this job, let alone how to do it well. So, do your research and homework; be persistent in asking questions; keep the agency's mission central; and, do your best to remember that our work is for future generations, not just our own, so keep the long view in mind as we try to consider the consequences of our decisions.

- The Department does allow us to attend WAFWA and I would encourage participation, if able.
- Volunteer for every opportunity. Get to know the bureau chiefs and their staff. Take every opportunity to learn about what the department does in the field for natural resources and how it impacts your constituents.
- Learn about committees, meet one-on-one with other Commissioners, meet with groups of staff.
- Study the policies and procedures for your agency
- Put the resources first in all cases using the best science available
- Observe and read provided material thoroughly
- Always protect the resource. Seek first to understand, and lean into experience and wisdom of those who have served
- Study and learn the North American Model for Wildlife Conservation and try to serve accordingly.
- Realize that this Commission is mainly agreeing with what the staff brings to the Commission. The staff has vetted the projects/programs and want approval. They are very supportive of clarifying and seeking more information about the areas they want approval for. Very little ideas come from the Commission
- There is a lot to learn about the agency. People are willing to help. After 5 years, I'm still trying to figure out the purpose of the Commission.
- The orientation itself was extremely thorough. It's an honor to serve our state in this capacity.
- Non-consumptive wildlife lovers are the future. Hunters and agriculture are the past.
- Get ready for both a challenging and very rewarding un-daunting task
- Spend time with other Board Members to get up to date on Policy and Procedure. The same should be spent with the director and his/her chiefs. ASK QUESTIONS!!!!
- Don't forget how lucky you are to be selected to serve. Spend some time listening and learning the dynamic and find a role where you can be helpful.
- Become a strategy and high-level issues generalist
- Technical issues specialists
- Attend WAFWA and build relationships with other states Commissions and Directors.
- Get ready to spend daily time on this position
- Attend WAFWA meetings if able to and build relationships with other state Commissioners
- More help and feedback about the exact role of the board. Help us understand how to work with other board members and help us set internal policies.
- Nothing new
- Science behind the recommendations. Better decisions and the ability to defend them.

- I am extremely new. However, being open minded and listening to the concerns of the people in your district. Trying to learn as much as possible from those that utilize public lands etc.
- Very important role!!! Study hard, participate in training/ learning in all areas of the agency.
- Build a strong relationship with tenured Commissioners and the Director or Deputy Director of the agency to learn the process of the policy setting cycle of Commission.
- Do not take the role of a Commissioner lightly. Commission decisions will impact constituents and the general public through policy, enforcement, strategies and management. Know that it's a steep learning curve and it takes a year to fully understand the Commission roles and responsibilities.
- Make a decision based on a foundation of data that is supportable. Do not cave to special interests.
- It takes time to learn about information and history with the Commissioners; I think it takes a year to understand most meetings. However, I believe new Commissioners should have the ability to learn in classes about their information.
- Be open minded and gather as much information as you can to make informed decisions

Bibliography

Blumm, M.C. and M.C. Wood. 2021. The public trust doctrine in environmental and natural resources law. 3rd ed. Carolina Academic Press. 109 pgs.

Decker, D. J., C.C. Krueger, R.A. Baer, Jr., and B.A. Knuth. 1996. From clients to stakeholders: a philosophical shift for fish and wildlife management. *Human Dimensions of Wildlife* 1(1), 70-82.

Decker, D.J, T.L. Brown, J.J Vaske and M.J. Manfredo. 2004. Human dimensions of wildlife. in *Society and Natural Resources*. ed. M.J. Manfredo, J.J. Vaske, B. L. Bruyere, D.R. Field and P. Brown. Modern Litho, Jefferson, Missouri, USA.

Decker, D.J., S.J. Riley and W.F. Siemer. 2012. Human dimensions of wildlife management. *in Human Dimensions of Wildlife Management*. ed. D.J. Decker, S.J. Riley, W.F. Siemer.

Decker, D.J., A.B. Forstchen, W.F. Siemer, C.A. Smith, R.K. Frohlich, M.V. Schiavone, P.E. Lederle, and E.F. Pomeranz. 2019. Moving the paradigm from stakeholders to beneficiaries in wildlife management. *The Journal of Wildlife Management*. 83(3), 513-518.

Decker, D.J., and L.C. Chase. 1997. Human dimensions of living with wildlife: A management challenge for the 21st century. *Wildlife Society Bulletin*. 25(4),788-795.

Decker, D.J., C.A. Smith, A.B. Forstchen, D. Hare, E.F. Pomeranz, C. Doyle-Capitman, k. Schuler, and J. Organ. 2016. Governance principles for wildlife conservation in the 21st century. *Cons. Letters*. 9(4): 290 - 295.

<https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/conl.12211>.

Decker, D.J. W.F. Siemer, A.B. Forstchen and C.A. Smith. 2018. The role of human dimensions in state wildlife management. *in State Wildlife Management and Conservation*. ed. T. J. Ryder. Pg 197.

Ford, J.K. S.J. Riley, T.K. Lauricella and J.A. Van Fossen. 2020. Factors affecting trust among natural resources stakeholders, partners, and strategic alliance members: a meta-analytic investigation. *Frontiers in Communication*. 5(9). doi:

<https://www.frontiersin.org/articles/10.3389/fcomm.2020.00009/full>.

Forstchen, A.B. and C.A. Smith. 2014. The essential role of human dimensions and stakeholder participation in states' fulfillment of public trust responsibilities. *Human Dimensions of Wildlife*. 19(5), 417-426.

Giles, R.H. Jr. 1978. *Wildlife Management*. W.H. Freeman. San Francisco, California, USA.

Hare, D. and B. Blossey. 2014. Principles of public trust thinking. *Human Dimensions of Wildlife*. 19(5), 397-406.

Hare, D., D.J. Decker, C.A. Smith, A.B. Forstchen and C.A. Jacobson. 2017. Applying public trust thinking to wildlife governance in the US: challenges and potential solutions. *Human Dimensions of Wildlife*. 22(6), 506-523.

Henderson, C.D., S.J. Riley, E. Pomeranz and D.B. Kramer. 2021. Stakeholder support for wildlife conservation funding policies. *Frontiers in Conservation Science*. *Frontiers in Conservation Science* 2, no. PNNL-SA-167726.

Hudanko, H. 2012. Exploring to influence of emotion on human decision making and human-wildlife conflict. *Human Dimensions of Wildlife*. 17(1), 16-28.

Leong, K.M., D. J. Decker, T.B. Lauber, L. Chase, S. J. Riley, and W. F. Siemer. 2012. Stakeholders as beneficiaries of wildlife management. *in Human Dimension of Wildlife Management* ed. D.J. Decker, S.J. Riley, W.F. Siemer. 26-41.

Lord, J.K. and A.S Cheng. 2020. Public involvement in state fish and wildlife agencies in the USA – thumbnail sketch of techniques and barriers. *Human Dimensions of Wildlife*. 11(11), 55-69.

Metcalf, J.D., G.R. Kams, M.R. Gade, P.R. Gould and J.T Bruskotter. 2020. Agency mission statements provide insight into the purpose and practice of conservation. *Human Dimensions of Wildlife*. 26(3), 262-274.

Miller K.K. and C.T.K. McGee. 2001. Toward incorporating human dimensions into wildlife management decision making. *Human Dimensions of Wildlife*. 6(3), 205-221.

Mortenson, K. and R.S. Krannich. 2001. Wildlife managers and public involvement – letting the crazy aunt out. *Human Dimensions of Wildlife*. 6(4), 277-290.

Mukherjee, N., A. Zabala, J. Huges, T.O. Nyumba, B. A. Esmail, and W.J. Sutherland. 2018. Comparison of techniques for eliciting views and judgements in decision-making. *Methods in Ecology and Evolution*, 9(1), 54-63.

Pomeranz, E. F., D.C. Hare, D.J. Decker, A.B. Forstchen, C.A. Jacobson, C.A. Smith, and M.V. Schiavone. 2021. Successful wildlife conservation requires good governance. *Frontiers in Conservation Science*, 2.

Raik, D.B., T.B Lauber, D.J. Decker, T.L. Brown. 2005. Managing community controversy in suburban wildlife management; adopting practices that address value difference. *Human Dimensions of Wildlife Management*. 10(2), 109-122.

Riley, S. J., D.J. Decker, L.H. Carpenter, J.F. Organ, W.F. Siemer, G.F. Mattfeld, and G. Parsons. The essence of wildlife management. *Wildlife Society Bulletin*. (2002): 585-593.

Riley, S.J., W.F. Siemer. D.J. Decker, L.H. Carpenter, J.F. Organ, L. Berchielli. 2003. Adaptive integrative management: an integrative approach to wildlife management. *Human Dimensions of Wildlife*. 8(2), 81-95.

Siemer, W.F. and D.J. Decker. 2006. An assessment of black bear impacts in New York. Cornell University, Department of Natural Resources, Human Dimensions Research Unit Series Publication 06-6, Ithaca, New York, USA.

Sullivan, L.M., M.J. Manfredo, T.L. Teel. 2022. Technocracy in a time of changing values: wildlife conservation and the relevancy of governance reform. *Conservation Science and Practice*. 4(2)e545.

Sullivan, L.M. 2020. Wildlife governance in an era of social change: how science, politics and culture influence conservation governance. PhD dissertation, Colorado State University.

Dowry, R.K. and A.S. Cheng. 2020. Tensions between fiscal accountability, policy and collaborative management implementation in state fish and wildlife agencies. *Environmental Management*. 65(4),548-564.

Tsing, E.M., J.C. Barnes, A.A. Dayer. 2021. A web-based approach to stakeholder analysis for identifying and understanding broader constituencies in wildlife conservation. *Society and Natural Resources*. 34(8)1133-1146.

Wei. W. 2021. Authenticity and originality, objectivity and subjectivity in conservation decision making – or is it just a matter of taste? *Studies in Conservation*. 67(1-2), 15-20.