

INTERAGENCY GRIZZLY BEAR COMMITTEE (IGBC)

**BEAR SMART  
COMMUNITY FRAMEWORK:  
MANUAL FOR COMMUNITIES**

PREPARED BY ANDREA MOREHOUSE AND THE IGBC BEAR  
SMART COMMUNITY TECHNICAL WORKING GROUP



MAY 2023

## Table of Contents

Introduction .....	2
Bear Behavior .....	2
Human-Bear Conflicts .....	3
IGBC Bear Smart Community Framework.....	4
IGBC Bear Smart Community Framework.....	4
Finding a Consultant .....	5
1: Establish a Bear Smart Committee .....	5
Overview .....	5
Roles and Responsibilities of Bear Smart Committee.....	5
Recommended Composition of Bear Smart Committee .....	5
Conclusion.....	6
2: Complete a Bear Smart Community Assessment .....	6
Overview and Goals .....	6
Bear Smart Community Assessment Components .....	7
3: Develop a Bear Smart Community Plan.....	13
Overview and Goals .....	13
Bear Smart Community Plan Components .....	13
Next Steps .....	18
4: Implement the Bear Smart Community Plan.....	18
IGBC Bear Smart Community Coordination.....	19
Acknowledgements.....	19
References .....	20
Bear Behavior.....	20
Idaho .....	20
Montana.....	20
Wyoming.....	21
Washington.....	21
U.S. Fish and Wildlife Service .....	21

## Introduction

The Interagency Grizzly Bear Committee (IGBC) supports recovery and delisting, and ongoing conservation of grizzly bear populations and their habitats in areas of the western United States through interagency coordination of policy, planning, management, research and communication. Grizzly bear conservation is complex and only made possible through partnerships. IGBC members recognize and mutually respect the authorities and mandates of all parties under federal and state law. The IGBC is a cooperative effort of its members, created in 1983. For more information, see <https://igbconline.org/>.

Communities whose residents live, work, and/or recreate in areas inhabited by bears face a unique set of challenges. Indeed, facilitating shared landscapes between humans and wildlife wherein both people and wildlife succeed is a global conservation challenge. While bear populations in some areas remain at risk, populations in other areas are increasing and expanding in geographic distribution. Similarly, human populations and development are also increasing in some areas. Together, these increases enhance the potential for conflicts. Conflicts between people and bears can result in economic impacts as well as risks to human safety, which in turn have negative consequences for individuals, communities, and bears.

Proactive approaches can help reduce the potential for future conflicts. There has been a substantial amount of research on bear behavior and human-bear conflicts over the last several decades and this information can be used to develop effective human-bear conflict mitigation strategies that help communities and bears more effectively share the landscape.

The IGBC supports collaborative community-led proactive approaches that benefit both people and bears by reducing conflicts and improving human safety in areas where people and bears share the landscape. The IGBC Executive Committee has adopted the IGBC Bear Smart Community framework. The framework is intended to be flexible enough so that it can be adapted by individual communities to fit their needs. This manual provides details that communities can use to reduce the frequency of human-bear conflicts and decrease the risks to human safety. The introductory sections that follow provide a brief overview of grizzly and black bear behavior and human-bear conflicts, and a description of the framework and its goal. The manual outlines and describes how communities can take proactive steps to prevent human-bear conflicts by voluntarily establishing their own Bear Smart Committees, completing a Bear Smart Community Assessment, and developing and implementing a Bear Smart Community Plan. Additionally, the references section provides numerous resources containing additional information that will be helpful in working towards becoming bear smart.

This manual was prepared by independent consultant Andrea Morehouse and the IGBC's Bear Smart Community Technical Working Group.

### *Bear Behavior*

Both grizzly and black bears are present in the western United States and understanding their biological requirements can help community members develop strategies for conflict prevention that help people and bears better share the landscape. There is a plethora of research on grizzly and black bear biology and selected resources appear in the References section of this document under the heading "Bear

Behavior.” Communities are encouraged to view these references for further details about bear behavior, particularly as it relates to sharing the landscape and developing a Bear Smart Community.

Grizzly and black bears are opportunistic omnivores, meaning they eat a wide variety of both plant and animal foods depending on what is available to them. Bears need to consume large quantities of food to accumulate the fat reserves required to survive several months of hibernation. For females of breeding age, this is particularly important because while bears mate in May to July, implantation does not occur until the bear is hibernating and will only occur if sufficient fat reserves are available. It is this search for food that is often at the root of human-bear conflicts.

Bears use a variety of habitats. In general, black bears tend to prefer more forested areas, while grizzly bears tend to occupy a wider range of habitat types including open, non-forested habitats. These are generalities, however, and within their broad range and distribution, it is important to remember that bears can be present anywhere. For both species, the availability of foods is a driving factor in habitat selection and use. Many communities in the western United States occur in areas of excellent bear habitat; bears that live adjacent to these cities or towns may be drawn into the community by natural features such as creeks and corridors, as well as both natural and non-natural human-related food sources. Further, as human populations in some areas expand, they can encroach on bear habitat; this can create new foraging opportunities for bears and create challenges for both bears and people, potentially resulting in conflict. When conflicts between people and bears occur, it frequently involves bears protecting their food, young, or personal space. Generally, the active bear season occurs from March to December. However, while bears are most active during this time period, they can be present outside of these dates. It is always best to assume bear presence and avoid an encounter.

### *Human-Bear Conflicts*

Seeing a bear can be a positive and memorable experience; serious negative encounters with bears are rare. However, wherever bears and people overlap, the potential for conflict exists. Human safety and bear survival are dependent on individual and community actions. It is easier to avoid a conflict than it is to deal with one. This manual provides resources to help communities prevent and mitigate human-bear conflicts to the benefit of both people and bears. If conflict does occur, please notify the local state or federal agency.

As noted above, the omnivorous nature of bears means that they consume a wide variety of foods. Bears rely on their sense of smell to find food and because of this, anything with an odor can be an attractant to bears. Probably the greatest reason that bears are attracted to communities is the concentration of non-natural human-related foods that are found there. Non-natural human-related foods are attractive to bears because they contain highly concentrated sources of calorie-rich foods that require little energy expenditure to acquire. This is problematic because when bears receive anthropogenic (i.e., human related) food rewards, they lose their wariness and become less vigilant around people, which in turn can increase the chance of human-bear interactions.

A bear’s use of anthropogenic food resources can vary depending on the availability of natural food sources. For example, in years of high berry productivity a community might experience fewer encounters with bears while in years of poor berry production bears tend to travel more and might

increase their time spent within a community in search of human-related foods to meet their caloric needs. Females with cubs feeding on anthropogenic food sources can be particularly problematic because of the evidence for social learning in this species, meaning that the cubs might grow up and continue to use these non-natural food resources.

In short, many variables can affect a bear's attraction towards human areas. The intent of this framework is to proactively reduce the risk of conflict as much as possible. Understanding what variables influence human-bear conflicts can better help a community address the root causes that can be managed. This idea is further discussed in the attractant sections below.

### *IGBC Bear Smart Community Framework*

The Interagency Grizzly Bear Committee (IGBC) supports the recovery, delisting, and ongoing conservation of grizzly bear populations and habitats in the western United States. The group provides for the coordination of grizzly bear policy, planning, management, research, and communication and includes representation from a variety of agencies and organizations. The IGBC has proven to be a successful model for agencies working cooperatively and coordinating recovery efforts over multiple jurisdictions, and substantial progress has been made toward recovering the species. The intent is to supplement existing efforts with a cohesive, flexible framework that can be used by a variety of communities across the western United States to reduce or mitigate human-bear conflicts and decrease risks to human safety. By establishing an IGBC Bear Smart Community Framework, the hope is to bring together the expertise and experience gathered through existing and past bear research and management efforts to ensure the best utilization of resources, prevent duplication of efforts, and to support community-based conservation endeavors.

*The overall goal is to support collaborative community-based strategies that benefit both people and bears by reducing conflicts and improving human safety in areas where people and bears share the landscape.*

Central to this framework is the idea that both people and bears have a place on the landscape. Living with wildlife, however, means different things to different people. There is no one-size-fits-all solution to human-bear conflicts, and there is no one 'right way' to share the landscape with bears. The path towards living successfully with bears will include a variety of strategies, including numerous conflict mitigation tools, outreach and education efforts, management of bear populations, and collaborative partnerships. Bear management and removal will continue to be tools that are required in certain situations. This framework is intended to support communities in the development of proactive strategies that are within the community's jurisdiction. The framework is meant to provide consistent guidelines yet be flexible enough so that it can be adapted by individual communities to fit their needs.

### **IGBC Bear Smart Community Framework**

There are four elements of the IGBC Bear Smart Community Framework:

1. Establish a Bear Smart Committee
2. Complete a Bear Smart Community Assessment
3. Develop a Bear Smart Community Plan
4. Implement the Bear Smart Community Plan

Further details on each of these elements are included in the sections that follow. The intent of these sections is to provide sufficient information to guide communities through the process of completing each of these elements. However, because each community is unique, the manual is not meant to be prescriptive, it is intended to provide a consistent framework while still allowing for flexibility.

### *Finding a Consultant*

While not required, communities might find it useful to work with an individual familiar with bear behavior and human-bear conflicts throughout the process (e.g., biologist, independent scientist, wildlife consultant); a professional's expertise may be particularly helpful in completing the Community Assessment and Community Plan. Members of the IGBC Bear Smart Community Technical Working Group may be able to recommend an individual with the appropriate skill set. Other Bear Smart Communities may also be able to provide a reference. A consultant could also assist in grant writing and developing fundraising strategies, preparing subsequent reports.

### *1: Establish a Bear Smart Committee*

#### Overview

The formation of a committee to guide the community's Bear Smart program is fundamental to the community's success with this initiative. It is important that the committee includes a variety of perspectives, voices, and stakeholders that represent different aspects of the community. The overall purpose of the committee is to drive, deliver, and implement the Bear Smart program. The committee should represent the community; it is meant to be a collaborative, community-based group that operates on consensus. The IGBC recommends that the committee meets regularly to ensure continued progress on the initiative.

#### Roles and Responsibilities of Bear Smart Committee

The Bear Smart Committee has a number of roles and responsibilities. These include:

- Initiate and support the development of the Bear Smart Community Program
- Initiate and review the Bear Smart Community Assessment
- Write and develop a Bear Smart Community Plan that addresses the issues from the community assessment
- Work collaboratively to implement the Bear Smart Community Plan
- Monitor the progress of the program and evaluate the community's management strategies
- Refine the community plan on an as-needed basis based on monitoring and evaluation results
- Provide annual reports that share the program's progress with the community and provide direction to the program for the following year
- Report on actions

#### Recommended Composition of Bear Smart Committee

The Bear Smart Committee should consist of individuals that are prepared to commit the time required to develop and implement a successful program. Although there are several governance models that a

community could follow, it is recommended that the committee select a leader. For example, that person could be a volunteer committee chair or, if resources allow, a paid coordinator.

The following is a list of members to consider for inclusion in a Bear Smart Committee. Note, however, that membership will vary between communities depending on the circumstances unique to that area. The most important idea behind the committee is that it represents the demographics of the community. By including a variety of perspectives in the committee, the group is more likely to address the area's relevant concerns.

Members to consider for inclusion in a Bear Smart Committee:

- Local governments (city, and/or county)
- Tribal governments
- State Fish and Game Agency (e.g., biologist, bear specialist, conservation officers, education and outreach personnel)
- Solid waste management
- Non-governmental organizations (NGO) (e.g., watershed groups, conservation organizations)
- Representative community members (e.g., landowners, residents, farmers, ranchers, beekeepers, orchardists, homeowner association leaders)
- Educator (e.g., schoolteacher, university or college professor)
- Other community interest groups (e.g., naturalist club, rod and gun club)
- Local tourism representatives (e.g., Chamber of Commerce).
- Federal land management agencies (e.g., United States Forest Service, Bureau of Land Management, Fish and Wildlife Service, National Park Service)
- State land management agencies (e.g., Department of Natural Resources and Conservation)
- Community grant writer/individual with fundraising experience

Remember, not all committees will consist of all the above members. It is important to strive for a diversity of perspectives and skill sets to help advance the Bear Smart goals; the committee should reflect the community.

## Conclusion

The importance of the Bear Smart Committee cannot be overemphasized. The committee plays a critical role in the completion of the subsequent elements and by having a variety of people, agencies, skills, and perspectives, the committee will be able to more efficiently gather the necessary data to complete the application process. Additionally, maintaining a Bear Smart Committee is important for the long-term success of the program. The most successful communities will be those that have a strong Bear Smart Committee. See the "Working Collaboratively Resources" section of the References for further information and resources on establishing successful collaborations.

## *2: Complete a Bear Smart Community Assessment*

### Overview and Goals

Once the Bear Smart Committee is formed, the next step is to complete a Bear Smart Community Assessment. The overall goal of this assessment is to identify the current and potential risks for human-

bear conflicts within the community. It is an opportunity for the community to compile pertinent data to guide future work. It is also an opportunity to reflect on the current or potential challenges the community faces as they work towards finding ways to share the landscape with bears. Further, the assessment can help identify knowledge gaps and highlight areas where further information would be beneficial. The community assessment will be unique to each community. This community assessment will provide the information required to begin to develop the Bear Smart Community Plan. It is important to note that the goal at this stage is not to find solutions to the challenges/risks, but rather to simply identify them.

### Bear Smart Community Assessment Components

While assessments will be unique to each community, the content covered should be the same. Each Bear Smart Community Assessment should include the following 10 sections:

1. *Community Description*
2. *Bear Populations*
3. *Habitat and Wildlife Corridors*
4. *History of Human-Bear Interactions*
5. *Community Attractants*
6. *Education and Outreach Efforts*
7. *Solid Waste Management*
8. *Community Development*
9. *Enforcement*
10. *Human Safety and Community Attitudes*

The assessment document should be accompanied by relevant photographs, tables, and figures that support the information in the required sections. The community might not have information for each section, but the section should still be included in the document. For example, there might not be any current education efforts; in that case, the assessment document should still include the education section but simply acknowledge that education efforts do not currently exist. Further details on the type of information that should be included within each of these assessment components as well as potential sources of data are included below.

The community might also consider one additional component in their assessment: *Mapping*. While not required, the community might find a mapping component a useful tool in helping to complete their assessment. Details on mapping are also provided below.

#### Community Description

In this section, provide a descriptive overview of the community and the surrounding area. Things to consider describing in this section:

- Population and trend
- Economy types (e.g., agriculture, tourism, oil and gas, etc.)
- Community demographics
- Seasonal or year-round community
- Development trend



This type of information can often be found on the community's website or local Chamber of Commerce. The most recent census information for the community will also be helpful in terms of assessing this type of information.

### Bear Populations

Briefly describe what is known about the bear populations in the area. Information about bears can be obtained through resources available from state agencies as well as conversations with local biologists and human-bear conflict specialists.

Things to consider describing in this section:

- Bear species: black bears vs. grizzly bears
- Information about bear density and abundance
- Distance to known population or Grizzly Bear Recovery Zone edge (applicable for communities not currently within a known grizzly bear population or designated Recovery Zone)

### Habitat and Corridor Assessment

This section focusses on identifying the available bear habitat adjacent to (e.g., public forest land) and within (e.g., green space) the community. This is important to help understand how bears are using the landscape. This section should also include an assessment of wildlife corridors. Wildlife corridors are habitat and/or geographic features that facilitate the movement of wildlife, including bears. Common corridors include riparian areas along creeks or rivers. Corridors can also include patches of habitat that link larger areas. For example, a forested trail system through the city that links to larger habitat patches can act as a corridor. Identifying habitat and corridors is important because communities that have high-quality habitat are more likely to have bears present, even after attractants have been secured or removed.

Things to consider describing in this section include:

- Descriptive overview of the surrounding habitat and geographic features (e.g., forest type, riparian areas, creeks, rivers, mountain ranges)
- Descriptive overview of wildlife species present in surrounding area (e.g., predator species that use the area, ungulate species that are present)
- Identification and description of habitat/green space within the community (e.g., parks, playgrounds, trail networks, golf courses, campgrounds)
- Locations of the available habitat; consider identifying these areas on a map (see Mapping section below).

Information related to bear habitats and corridors can come from a variety of sources including:

- Discussions with area biologists and human-bear conflict specialists
- City/county maps
- Published literature
- Government reports
- Opportunistic observations of bear sign (e.g., tracks, trails, rub trees, day beds, scats)

- Discussions with community members or organizations such as hunting and fishing groups, landowners, naturalist groups, and recreationalists

### History of Human-Bear Interactions

In this section, communities should gather information about human-bear interactions. Information to consider describing in this section includes:

- Number of human-bear interactions reported
- Types of human-bear interactions reported (e.g., access to garbage, livestock depredation, human safety concerns)
- General locations of human-bear interactions reported
- Other bear activity within the community (e.g., bears feeding on natural food sources, bears traveling through riparian areas)
- Identification of high-risk sightings (e.g., bears near areas of high human use)
- Number of bears relocated or removed

When possible, it is helpful to consider trends in the information above. For example, the number of reported human-bear interactions might be available from state agencies on a yearly basis which can allow for the consideration of trends over time. Compiling this type of information during the assessment stage can be beneficial down the line when the community works toward evaluating their Bear Smart efforts.

Various agencies typically collect a wide range of data regarding human-bear interactions. The best way to obtain the information described above is through conversations with:

- State bear management specialists
- Game wardens
- Local wildlife managers
- Federal, state and/or tribal biologist
- Local law enforcement agencies

One limitation of agency records is that they only represent information reported by the public; unreported records are not captured. Thus, it is also worth reaching out to other groups and individuals to further flesh out information received from agencies. Conversations with various community members and organizations might provide additional information.

### Community Attractants

This section involves taking an in-depth look at the community and trying to identify things that can be considered an attractant for a bear. It will be helpful to have an individual familiar with bear behavior and biology assist with this section. Bears are omnivorous, meaning they eat a wide variety of both natural and non-natural or human foods. Attractants are a primary source of human-bear interactions and conflicts; thus, it is important to be as thorough as possible when identifying community attractants.

Provided below are examples of potential attractants. These lists, however, are not exhaustive. An attractant is anything that attracts wildlife. Not all attractants provide a food reward. For example,

beehives can be an attractant but if they are properly fenced, the bear will not get a food reward. Bears are less likely to return to an area if they do not get a food reward.

Examples of natural attractants:

- Berry-producing shrubs
- Plants such as glacier lilies or clover
- Fish spawning streams
- Ungulate calving areas
- Local wildlife populations of potential prey items such as turkeys, deer, birds, squirrels
- Road-killed carcasses
- Lush grassy fields (e.g., golf courses)

Examples of non-natural or anthropogenic attractants:

- Garbage at landfills and transfer stations
- Unsecured residential and commercial garbage
- Restaurant garbage and grease containment
- Parks and highway pull-out trash cans
- Orchards or residential fruit-bearing trees/shrubs
- Chicken/avian coops
- Gardens
- Beehives
- Small and large livestock operations
- Agricultural attractants such as grain, silage, and feed storage
- Livestock carcasses
- Leaked grain from train cars (e.g., along railroad, at switch yard, at truck stops)
- Birdfeeders
- Barbeques/smokers
- Outdoor pet food
- Oil/petroleum products
- Freezers/refrigerators kept outside
- Fertilizer with fish emulsion
- Compost

Assessing attractants can be done in a variety of ways. Examples of ways to assess attractants include:

- Compilation of human-bear interaction information as described in previous section
- Making observations while walking and/or driving around the community
- Discussions with community members and the Bear Smart Committee
- Conversations with agency personnel

Although assessed in this section, garbage and waste management are discussed in more detail in the Solid Waste Management section that follows. Keep in mind that some attractants are seasonal (e.g., berry producing shrubs, orchards, ungulate calves). Communities should work to identify the type, prevalence and general location of natural and non-natural attractants. The goal is not to identify the

location of every available attractant, but rather to identify patterns that can inform future efforts. Thorough documentation of these types of data will be important to guide the development of a Bear Smart Community Plan.

### Education and Outreach Efforts

This section should describe what, if any, education and outreach efforts currently exist within the community. It should identify what organizations or individuals are involved in the delivery of such programs. Education and outreach efforts can take a variety of forms from large public bear education events to simply having pamphlets on bear behavior available at agency offices.

Examples of education and outreach events that might exist in communities include:

- School and youth programs
- Speaker series
- Pamphlets or reading materials
- Signs at trailheads
- Bear spray trainings
- Bear fairs
- Community social media pages

Conversations with area educators, wildlife management agencies, and local environmental NGOs can help determine what, if any, education programs currently exist within the community.

### Solid Waste Management

This section should describe the status of waste management within the community, including both residential and commercial areas. Describe the methods of waste management (e.g., pick-up service or self-serve to a local landfill). If pick-up service is available, determine if trucks are automated or manual. The assessment should also include a description of practices used and landfills and/or refuse site transfer stations. In particular, the assessment should take note of whether or not any practices are in place to restrict access to garbage by bears or other wildlife bears and other wildlife (e.g., use of electric fencing, bear-resistant containers, scare devices, etc.). This type of information can be found by contacting the local solid waste management company, landfill operator, and/or the city or county solid waste board/division.

### Community Development

This section should identify known community expansion and/or development plans, if any, that are pertinent to bears. For example, a new housing development that abuts public lands or a new trail system through adjacent bear habitat. This type of information can be obtained through conversations with city planning officials and local governments. Identifying these areas during the assessment process can help highlight areas of potential concern for future human-bear interactions and can be valuable information for the Bear Smart Community Plan.

### Enforcement

This section should describe what, if any, enforcement options currently exist within the community that are pertinent to a bear's ability to access anthropogenic foods. Examples of this include:

- State and federal laws related to bears, human-bear conflicts, feeding of wildlife
- Local (city or county) bylaws or ordinances related to bears, human-bear conflicts, feeding wildlife, or securing attractants

In addition to describing the existing enforcement options, the assessment should also include details on the current compliance rate and/or enforcement actions. For example, there may be county bylaws in place but enforcement and/or compliance might remain low.

To obtain this type of information, review local and state wildlife regulations and/or consult with local government and pertinent wildlife agencies.

### Human Safety and Community Attitudes

This section can provide additional valuable information for the community. Describing the human safety concerns within the community as well as the varying attitudes and perspectives towards bears can help identify priority areas for future plan components such as outreach and education efforts. For example, what scenarios make people most concerned for their/their family's safety? Children walking to the bus stop, ranchers doing chores at dawn and dusk, children taking care of their 4H animals, or recreationalists riding a bike in a certain neighborhood are all examples of scenarios that might make people uncomfortable or concerned for their safety. This type of information can be assessed informally through conversations with a wide range of community members or more formally through a well-designed social survey. It can help identify additional areas of concern that can be addressed through various components of the Community Plan.

### Mapping

There is a spatial component to this work and the community might find it helpful to include a mapping section within their assessment document. Mapping can be done in a variety of ways. Information can be plotted collaboratively on a physical map or mapped digitally. If a consultant is hired for this assessment, they might have access to GIS or other professional mapping software. Google Maps and Google Earth are freely available, user-friendly options for communities.

Communities might find it useful to consider mapping the following items (recognizing that all items might not be applicable to all communities):

- Human-bear interactions
- Natural attractants
- Non-natural or anthropogenic attractants
- Bear habitat
- Wildlife corridors
- Community green space
- Recreational trails
- Schools
- Playgrounds

By mapping these items, the community can visually identify areas of high importance and/or risk. Sometimes, the visual representation can help identify hotspots of conflict or priority areas for conflict

mitigation efforts. However, mapping non-natural or anthropogenic attractants can involve privacy concerns and the community Bear Smart Committee should be cognizant and respectful of that; information that will be publicly distributed should not include personally identifying information.

### *3: Develop a Bear Smart Community Plan*

#### Overview and Goals

After the Bear Smart Community Risk Assessment is complete, the next step is to develop a Bear Smart Community Plan to address the specific issues and concerns identified in the assessment. The Community Plan will form the guiding document for Bear Smart efforts in the community. Community plans will be unique to each community and will represent the agreed upon path forward for improving human safety, decreasing and preventing conflicts, and sharing the landscape with bears.

The overall objectives of the plan include:

- Identifying community priorities
- Determining the necessary steps to successfully address the problems, concerns, and risks identified in the assessment
- Identifying barriers to the implementation of the plan
- Identifying the individuals, groups and/or agencies responsible for the plan's components
- Developing a timeline for each activity
- Creating a budget and cost estimate for the delivery of the program
- Establishing a plan for the evaluation and monitoring of the program

The development of the plan is a collaborative process, and the IGBC Bear Smart Community Working Group recommends using a consensus-based approach for identifying and assessing preferred solutions.

#### Bear Smart Community Plan Components

While plans will be unique to each community, the content covered within the plan should be consistent. Each Bear Smart Community Plan should be comprised of the following 9 components (note that they do not necessarily need to appear in this order):

1. *Human Safety and Community Attitudes*
2. *Attractant Management*
3. *Green Space Management*
4. *Education and Outreach*
5. *Solid Waste Management*
6. *Enforcement*
7. *Evaluation and Monitoring*
8. *Timeline*
9. *Budget*

Further details on the types of information that should be included in each of the above sections is described below. There is no one-size-fits-all solution to mitigating human-bear conflicts; a community should develop its Bear Smart Community Plan to address the unique risks and needs identified in the Bear Smart Community Risk Assessment. The information contained in this document is intended to

help guide the community through this process. Developing the plan will require input from a variety of individuals, organizations, and agencies. It will be an iterative process that takes time, dedication, and effort to complete.

### Human Safety and Community Attitudes

Community attitudes and perspectives towards bears will be an important factor influencing the implementation of the Community Bear Smart Plan. Thus, it is important to acknowledge any concerns and perspectives identified within the assessment and incorporate that information within the community plan. It is likely that human safety concerns will be addressed throughout other sections of this plan (e.g., attractant management, outreach and education). However, this section should briefly identify the primary concerns and outline where in the documents they are addressed

### Attractant Management

This section of the Community Plan should describe how the community intends to address the attractants identified within the Bear Smart Community Assessment. Removing or securing attractants is a powerful tool in reducing human-bear interactions. However, many non-natural or anthropogenic attractants are the responsibility of individual residents and companies, and as such, the responsibility for managing these attractants lies with these parties. Thus, this section of the Community Plan should not only provide techniques and descriptions of how to remove or secure specific attractants, but it should also describe a larger plan that addresses how the community Bear Smart Program will support individuals and businesses in the management of their attractants. This support may come in a variety of ways such as incentives, cost-sharing initiatives, or other programs. For example, if fruit trees have been identified as an attractant, a fruit collection program that connects apple pickers with individuals that own an apple tree could provide support for individuals to deal with this attractant. Similarly, if beehives have been identified as a community attractant, the community could support apiary owners by hosting a workshop on electric fencing. Bylaws, ordinances, and community planning documents might also provide guidance and enforcement for attractant management initiatives. Additionally, outreach and education efforts will be an important component to engaging more individuals in successful attractant management. Ultimately, communities are a collection of individuals, businesses, organizations, schools, and various other stakeholders, and the implementation of attractant management techniques will in many cases fall to these entities. Similarly, the community's success in managing its attractants will ultimately be the cumulative success of these individual efforts, and the Bear Smart Community Plan should provide an overview of how to support these efforts across individuals and companies. This plan of support may be described in this section, or may fit better within subsequent sections (e.g., Education and Outreach, Solid Waste Management, Enforcement).

Attractants can be managed through a wide variety of tools and techniques depending on the type of attractant. Listed below are examples of different types of attractant management; these are examples only and the lists are not exhaustive.

Examples of ways to manage natural attractants include:

- Removal of berry-producing shrubs from community green spaces and recreation areas
- Seasonal or temporary closure of areas with highly concentrated bear foods such as fish spawning areas or ungulate calving grounds
- Removal of road-killed carcasses

Examples of ways to manage non-natural or anthropogenic attractants include:

- Storage inside secure buildings
- Electric fencing, permanent and temporary
- Electric mats
- Electric netting
- Removal of bird feeders, or replacing bird feeders with bird baths
- Removal of fruit from trees and shrubs, or replacing fruit bearing trees/shrubs with flowering, non-fruiting varieties
- Bear-resistant garbage cans/waste storage
- Grain bin upgrades (e.g., cement floors, hopper bottom bins, bear-resistant grain bin door)
- Scare devices (e.g., Foxlights, Critter Gitter)
- Livestock carcass removal programs

There are a wide range of resources available documenting and describing the above techniques. Rather than describe each of these in detail, there is a list of references available under the heading “**Error! Reference source not found.**” in the Reference section of this document. It is important to remember that the solution for managing attractants must work for the person implementing it; what is best for one community might not be best for another.

### Green Space Management

This section should describe how community green space (i.e., open space areas such as parks, trail systems, and recreation areas) and bear habitat identified within the community assessment will be managed. Green space can provide habitat for bears, but it can also increase the risk to human safety if bears and people are routinely encountering each other. The community assessment identified bear habitats and corridors including green space and may have mapped these areas out. In the community plan, the community should consider what, if any, changes need to be made to help reduce human-bear encounters in these areas.

Examples of green space management include:

- Removal of natural bear foods
- Increasing visibility through targeted landscaping, brushing and plant removal, particularly in high-risk settings such as schools and playgrounds as well as areas on the edge of the community or adjacent to larger areas of bear habitat
- Seasonal closures of particular areas and/or adding bear awareness signage
- Replacing fruiting trees and shrubs with non-fruiting varieties
- Developing a plan for community landscaping that avoids the use of fruiting trees or other natural bear foods

### Education and Outreach

This section should describe the community’s plans for outreach and education. It is likely that a wide variety of education and outreach opportunities are required to reach as broad a spectrum of the community as possible. This aspect of the plan should consider the target audience as well as how best to reach them. While the messaging should be consistent, the delivery will need to be adapted to best



suit the target audience. Additionally, education and outreach efforts should focus on addressing the primary concerns identified through the community assessment process.

Target audiences might include:

- Community residents
- Visitors, tourists, vacation rental owners
- Recreationalists
- Hunters and Anglers
- Industrial workers
- Farmers and Ranchers
- Youth
- Commercial businesses (e.g., restaurants, golf courses, guide/outfitters)

The overall objective of the education and outreach efforts should be to help individuals develop a greater understanding of bears and Bear Smart practices. Additional education and outreach objectives include:

- Facilitating community support for the Bear Smart initiative
- Sharing information about bear behavior and how to reduce negative bear encounters
- Providing recommendations on how to behave during a bear encounter, including the proper use of bear spray
- Helping individuals and businesses identify bear attractants on their property and discussing options for effectively managing those attractants
- Reducing real and perceived human safety risks
- Facilitating conversations about bears and addressing new issues and concerns as they arise within the community

Education and outreach efforts should be consistent with IGBC education and outreach. References for community education programs and IGBC-consistent messaging are provided in the References section of this document under the heading “**Error! Reference source not found.**” Additionally, communities may be able to find bear education specialists in their area to assist with bear education outreach, training, and development of materials.

### Solid Waste Management

This section should detail the community’s plan for managing its solid waste. Unsecured garbage is a primary bear attractant and can be a precursor to human-bear conflicts; securing garbage benefits both people and bears. A community-wide bear-resistant waste management system is a significant investment, and the best solution will vary from community to community. Collaboration between residents, waste haulers, landfill facilities, and city/county governments is required for success.

The most important concept is that garbage and recycling need to be inaccessible to bears at all stages, from generation to disposal. Further, all city/county-owned waste management components should be bear-resistant. Effective waste management will also require high rates of compliance within the community. Community bylaws or ordinances might be required to ensure compliance. A phased approach to waste management might be required given the costs associated with this element.

There are a variety of options for the management of residential and commercial waste. Examples and references are provided in the References section of this document under the heading “**Error! Reference source not found..**”

### Enforcement

Within this section, communities should describe how they will address non-compliance issues when/if they arise This could be the implementation of bylaws/ordinances or a plan for their development or an alternative method to address non-compliance. This section should outline how any bylaws, ordinances, or state/federal laws apply to the enforcement of attractant management efforts, including waste management. If no relevant bylaws or ordinances exist, the community should detail their plan for non-compliance or consider creating appropriate bylaws. If bylaws/ordinances are the desired enforcement tool, the plan should outline the steps required within their particular community for the development of applicable bylaws and/or ordinances as well as include some draft language for consideration by the appropriate governing body..

### Evaluation and Monitoring

This section should outline a plan for evaluating and monitoring the implementation of the Bear Smart program. In particular, this section should describe the metrics that will be tracked to measure program success and progress. Metrics of success will likely vary between communities depending on the priorities identified within the Bear Smart Community Plan. Program evaluation is often an afterthought for conflict mitigation efforts, yet it is a critical component to understanding program gaps and areas for improvement. Thus, the community should develop ideas for program evaluation before the implementation of the program begins so that the appropriate information can be collected.

Ideas of metrics to monitor include:

- Community attitudes and perspectives towards bears, assessed through a social survey
- Number of attractant management projects completed (e.g., electric fences installed, grain bins modified)
- Successful implementation of pertinent bylaws and ordinances
- Number of bears trapped, relocated, and/or killed
- Number of reported human-bear conflicts
- Spatial locations of human-bear conflicts
- Spatial locations of conflict-mitigation efforts
- Adoption of the Bear Smart Community Plan into large scale community planning documents
- Number of residents complying with bear-resistant garbage storage
- Number of fruiting trees replaced with non-fruiting varieties
- Number and type of education and outreach programs delivered
- Attendance and participation in education and outreach programs
- Community satisfaction with Bear Smart Program, assessed through social surveys, interviews, or other social science evaluation methods

Tracking these metrics will require collaboration between the community and various agency partners. For example, state agencies typically track the number of bears trapped, relocated or killed; they also

typically have a database to track human-wildlife conflicts. Collaboration with these agencies will help ensure the community receives the information necessary to help evaluate their Bear Smart efforts.

Suggestions and ideas for program evaluation can be found under the “Evaluation and Monitoring” heading in the References section of this document.

### Timeline

This section should outline a timeline for the project. Becoming a Bear Smart Community is a large effort, and the plan may take years to fully implement. The timeline should identify roles and responsibilities and specify the individuals, groups, and agencies responsible for leading various aspects of the plan as well as targeted deadlines for the completion of various components. Creating a timeline will also help the community prioritize the plan components and identify immediate versus longer-term goals.

### Budget

The community plan needs to include a cost estimate for the various components. In conjunction with budget estimates, the community is encouraged to brainstorm strategies for securing funding to support the implementation of the Bear Smart Community Plan.

### Other Considerations

While not a required component of the Bear Smart Community Plan, some communities might find it beneficial to review and update any existing community planning documents so that they are consistent with the Bear Smart Community Plan. Because governments change, this can be a good long-term strategy to ensure that Bear Smart practices are incorporated into future community planning and development scenarios. Collaboration and consistent communication between the Bear Smart Committee and local governments will help ensure the objectives of the Bear Smart plan are solidly incorporated into community governance.

### Next Steps

Once you have completed a draft of your Bear Smart Community Plan, you may provide the draft to the IGBC Bear Smart Community Technical Working Group, who may be able to provide an opportunity to receive feedback on your plan before its implementation as noted in the overview of this chapter, the writing of Bear Smart Community Plan is an iterative process that might take several drafts before a final version is complete. An IGBC Bear Smart Community Advisor may be available to provide feedback and guidance throughout this iterative process.

## *4: Implement the Bear Smart Community Plan*

Now that the community has completed its assessment and developed its Bear Smart Plan, the work on the ground begins. The final step is to implement the plan. An implementation report can specifically address all components of the community plan and describe how they have been implemented or the progress towards implementation. The plan might take a community years to implement. In recognition of the time involved for full implementation, and so it can be helpful to regularly show that they have

made substantial demonstrable progress towards implementing all aspects outlined in the community plan.

## IGBC Bear Smart Community Coordination

The IGBC Bear Smart Community Technical Working Group developed this manual, and the group will continue to share information on best practices across the states of Idaho, Montana, Washington, and Wyoming. Check the IGBC website <https://igbconline.org> for the latest information.

In addition each State will decide how to handle specific engagement with communities and state specific desired outcomes. Communities can look to their State wildlife agencies, and may also be able to find assistance from the US Fish and Wildlife Service in making progress on this framework. We encourage communities to check in with an agency experts on this work. In addition, we also encourage development of documentation that can be shared and learned from by other communities in the region:

- List of Bear Smart Committee members
- Completed Bear Smart Community Risk Assessment
- Completed Bear Smart Community Plan
- Report on the implementation of the Bear Smart Community Plan

The implementation report can provide details on community progress and demonstrate that implementation of the Bear Smart Community Plan is occurring.

The IGBC recognizes that implementing the community plan will take time and that some plan elements will continue to require work to fully execute. Becoming Bear Smart may take time, and will require continued efforts over time. We recommend a periodic or 5-year review to ensure that the community is continuing to assess its needs and take stock of the risks and concerns present to ensure that they are being appropriately addressed by the community plan. The review also helps to identify any areas for improvement. To help a community track its progress, it is recommended that the community complete internal annual reporting including tracking progress and evaluation metrics (e.g., number of conflicts, number of bear-resistant garbage cans, number of outreach events, etc).

Completing and maintaining the IGBC Bear Smart Community Framework should be something a community takes great pride in!

## Acknowledgements

Thanks to Andrea Morehouse of Winisk Research and Consulting for working with the IGBC Bear Smart Community Technical Working Group to prepare this document. The Bear Smart Working Group initiated the development of this document and provided ideas, edits, and discussion throughout the process. Working group members include: Kim Annis, Montana Fish, Wildlife and Parks; Mike Badry, British Columbia's Bear Smart Community Program; Jennifer Bruns, Idaho Fish and Game; Jennifer Carpenter, National Park Service; David Diamond, U.S. Forest Service; Kyle Garrett, Wyoming Game and Fish; Kris Inman, U.S. Fish and Wildlife Service; Christy Johnson-Hughes, U.S. Fish and Wildlife Service; Kim Johnston, People and Carnivores; Jeremy Nicholson, Idaho Fish and Game; Danielle Oyler, Montana

Fish, Wildlife and Parks; Lori Roberts, Montana Fish, Wildlife and Parks; Denise Shultz, National Park Service; and Dillon Tabish, Montana, Fish Wildlife and Parks. Thanks also to all of the bear specialists in Montana, Idaho, and Wyoming for reviewing the document and providing feedback.

## References

The IGBC consists of representatives from the U.S. Fish and Wildlife Service, U.S. Forest Service, National Park Service, Bureau of Land Management, U.S. Geological Survey, and the state wildlife agencies of Idaho, Montana, Washington, and Wyoming. Native American tribes that manage grizzly bear habitat are also represented. There is also representation from British Columbia and Alberta. Additional information about the IGBC including links to all partner websites can be found at [About Us - Interagency Grizzly Bear Committee \(IGBC\) \(igbconline.org\)](#). Below are a variety of references sorted by topic. The intention is to provide an assortment of additional resources that communities can look to for further information. It is not an exhaustive list. The IGBC is not necessarily affiliated with or intending to promote the organizations or resources listed below.

### *Bear Behavior*

Each of the partner state agencies as well as the U.S. Fish and Wildlife Service have extensive information on bear behavior, conservation, and management on their agency websites. Included in this section are links to their websites as well as additional resources on bear behavior.

#### Idaho

*Idaho Fish and Game – Grizzly Bear Conservation and Management:* On this Idaho website, there is extensive information about grizzly bear conservation and management in Idaho. Included on this page are links to other resources on bear behavior and how to safely live, work, and recreate in bear country. [Grizzly Bear Conservation and Management | Idaho Fish and Game](#)

#### Montana

*Montana Fish, Wildlife & Parks – Bears in Montana:* The link below is for the state of Montana and includes information on bear conservation and management, bear identification, safety in bear country, and general information about both grizzly and black bears. [Bears In Montana | Montana FWP \(mt.gov\)](#)

*Montana Fish, Wildlife & Parks – Bear Aware:* This website includes information on bear behavior and more specific information related to how to stay safe when recreating, camping, hunting, and fishing in bear country. There are also suggestions for farmers and rancher as well as general best practices for anyone that lives within bear range.

[Bears In Montana | Montana FWP \(mt.gov\)](#)

## Wyoming

*Wyoming Game and Fish Department – Large Carnivore Information:* This website from Wyoming, includes links to the state’s management plans for both grizzly bears and black bears, as well as links to the state’s Bear Wise program. On these sites, there is information about bear distribution and identification, education documents, and annual reports on bear management actions.

[Wyoming Game and Fish Department - Large Carnivore](#)

*Bear Wise Wyoming:* This website contains information about Wyoming’s Bear Wise program including links to a variety of resources on how to safely live, work and recreate in landscapes shared with bears. Under the bear behavior section of this page, there are links to aggressive/defensive and predatory bear behaviors. These links will provide information on the specifics of bear behavior and includes details about how to act in those situations.

[Wyoming Game and Fish Department - Bear Wise Wyoming](#)

## Washington

*Washington Department of Fish and Wildlife:* This website includes information about black bears, including information about regulations, preventing conflicts, and bear encounters.

[Black bear | Washington Department of Fish & Wildlife](#)

## U.S. Fish and Wildlife Service

*U.S. Fish and Wildlife Service – Ursus arctos horribilis*

This website contains a general overview of grizzly bears, including their physical characteristics and behavior. There is also information about the designated recovery zones and general population information. Towards the bottom of the page there is a link to an interactive map showing grizzly bear distribution in the lower 48 States.

[| U.S. Fish & Wildlife Service \(fws.gov\)](#)