FOREST PLANNING DURING CHANGING TIMES

A Handbook for Environmental Action

A GRASSROOTS ACTIVIST PROJECT OF SIERRA CLUB

SIERRA CLUB
FOUNDED 1892

Table of Contents

Friends,

If you like to hike, camp, kayak, canoe, climb, hunt, fish, walk, stroll, bike, sit, sketch wildflowers, watch wildlife, go birding, or simply sit and reflect upon the beauty and diversity of our fantastic wild forests, then this handbook is for you.

If you rarely get outdoors but you still want to protect these remaining wild places and wildlife habitat; keep fresh, clean water trickling down from the forests; keep trees cleansing the air; preserve opportunities for recreation, and promote more diverse rural economies; then this handbook is for you.

This how-to handbook will give you the information, skills, and training to become an active, effective protector of our public forests and grasslands and their fish and wildlife habitat.

There are many reasons to get involved in the planning process for a national forest. Perhaps you want to insure the future of a special place—a favorite hiking, hunting, or fishing spot. Maybe you want to make a favorite equestrian route off-limits to off road vehicles (ORVs), or begin the process of designating a wild river or a new wilderness area. If so, this manual is for you.

This manual also seeks to empower conservationists to use the forest planning process to proactively address the challenges our National Forest System faces from climate change.

The "climate smart" approaches and tools identified in this manual may also apply to the development of land and resource management plans initiated by other agencies, and be put to use assisting our friends in other organizations to address common challenges. We provide a brief overview of climate change, its known and anticipated impacts; planning tools that should be used to manage forest and grassland resources to achieve the goal of promoting the resistance and resilience of ecosystems to climate change; a short series of case studies; and appendices listing additional resources. Throughout this handbook we will offer you clickable links to other online resources for more information on the topics discussed, making it easy to explore a topic of particular interest to you.

This handbook is a guide for you to become an effective forest and grassland advocate. Together we can make a difference in our efforts to protect our wild lands, plants, and wildlife. Read on!

> "PROTECTING OUR PLANET IS OUR FINEST FORM OF PATRIOTISM."
>
> RACHEL CARSON

INTRODUCTION

OUR NATIONAL FORESTS AND NATIONAL GRASSLANDS NEED PROTECTION

We have a responsibility to protect wildlife and wild places and leave a better world for future generations. The natural legacy we leave our children and grandchildren depends on the steps we take today as stewards of America's wild places and wildlife. As part of our country's natural heritage, every American is part owner of these national forests and grasslands.

We have a choice to make: whether to manage our public lands like a gift to future generations, or as a giveaway for special interests. Ensuring that whole natural systems are healthy will help them survive new and growing threats, while protecting clean air and water for our communities.

For more information on the value of our national forests see this.

A BRIEF HISTORY OF OUR NATIONAL FOREST SYSTEM

More than one hundred years ago a conservation movement began to protect our nation's remaining public forests from the ravages of development.

Since those earliest days, Sierra Club members have worked within that movement to ensure that these public forests and the wild heart of America that lies within them would survive into the future. John Muir, who founded the Sierra Club in 1892, was a key voice in the effort.

During the last decade of the 19th century and the first decade of the 20th, the focus was on establishing the forest reserves (which became national forests) out of unprotected areas of federally owned lands. Making these lands into national forest reserves removed the threat that they would be converted to private lands through the homestead laws, and offered hope that instead the lands would be well-managed by the federal government and the wildlife within them would thrive.

At that time, U.S. presidents had the power, with the stroke of a pen, to designate a national forest reserve. Presidents from Benjamin Harrison to Theodore Roosevelt created national forest reserves before this presidential power was withdrawn by an act of Congress in 1907.

The boundaries of many of our national forests were initially drawn to protect the headwaters of major river systems and safeguard water supplies to be used for drinking water, agriculture, commerce, recreation, and other human uses.

In 1907, the forest reserves were renamed national forests. In 1911, the Weeks Act authorized the purchase and restoration of degraded forest watersheds, which led to the establishment of many eastern national forests. In 1937, following the Dust Bowl, abandoned degraded homesteads on the prairies were reacquired and conservation practices were put in place under the Bankhead-Jones Act; these became our national grasslands. Today all these lands form the National Forest System, which covers more than 192 million acres from Alaska to Florida and includes more than 150 individual national forests and grasslands.

At first, national parks were viewed as the places where preservation of a landscape was practiced, and national forests were managed under a more utilitarian philosophy where logging and other commercial uses would be accommodated. But as early as 1924 came the establishment of the first administratively designated wilderness area. The Gila Wilderness in New Mexico was set aside by a regional U.S. forester at the request of a forest ranger named Aldo Leopold. In the 1930s the Forest Service established the Primitive Area System to protect some areas of undeveloped lands.

But these were just administrative designations that could all too easily be undone with the stroke of a pen by a future administrator. In 1935, The Wilderness Society was formed to devote itself particularly to the task of protecting wild places in perpetuity. Working closely with the Sierra Club, The Wilderness Society lobbied for decades to establish a permanent National Wilderness Preservation System that would encompass all federal

lands. Success was achieved in 1964 with the passage of the Wilderness Act, in which Congress set aside federal lands, including those on national forests, as designated wilderness where by law, logging, mining, road-building, and the use of motorized vehicles or mechanical transport was prohibited.

Compounding the threats to National Forest System was the emergence of the U.S. Forest Service's new self-proclaimed mission to "house the American people" by cutting more trees in support of the post-World War II housing boom. This trend of expanding the rate of timber cutting on national forests continued well into the 1980s as influential members of Congress gave increased appropriations to the Forest Service for the explicit purpose of building more logging roads and cutting more timber. During this period the agency began to rationalize many of its activities as being designed to foster the economic well-being of nearby rural economies.

But by the 1970s a new voice for the national forests had emerged in the form of a burgeoning environmental movement that began to make the protection of our national forests from timbering a major national concern. Activists succeeded in a precedent setting lawsuit in 1975 that challenged the power of the Forest Service to clearcut the Monongahela National Forest of West Virginia. The suit, upheld by the regional U.S. Court of Appeals, stated that the 1897 law under which the Forest Service was operating only allowed them to mark and cut only "dead, mature and large growth trees individually."

> *"The first steps taken nationally to preserve fast-disappearing forests came in 1891 when President Benjamin Harrison set aside 13 million acres of forest reserves. In 1905, Teddy Roosevelt added 132 million acres more, renamed them national forests and created the Forest Service to manage them. Eventually the national forest system grew to 192 million acres. A little over 35 million of those acres have been protected forever (if anything is forever) as wilderness, off limits to all motorized activity. Well over half the national forest acreage has been logged or mined, sometimes both. As of the late 1990s, there were a carefully measured 58.5 million acres of official unprotected roadless areas, known as inventoried roadless areas (IRAs) on national forests across the country, with a heavy concentration in the West, especially Alaska and Idaho."*
>
> From: *The Roadless Rule; The Struggle for the Last Wild Forests,* Tom Turner, Island Press 2009

As a result, in 1976, Congress passed a new law governing the management of our national forests with the unsurprising name of the National Forest Management Act (NMFA). A copy of the law is available here. It was designed to reduce clear-cutting, provide a more scientific approach to the management of national forests and national grasslands, and provide the public with an opportunity to be involved in the process by telling the Forest Service how to prepare individual land management plans for each national forest and national grassland.

Other major environmental statutes were also passed during this period that have a major influence on how national forests are managed, including the National Wild and Scenic Rivers Act, the Endangered Species Act, the Clean Water Act, and the National Environmental Policy Act.

But NFMA is the primary law governing the management of our National Forest System, and that is the main subject of this handbook. Since the passage of the NFMA, the Forest Service has developed regulations that govern the process of developing long-range plans for each national forest. The Forest Service issued new regulations in 2012. The regulations are obtainable here.

In the more than 100 years since the creation of the National Forest System, our public forests and grasslands have had to endure unsustainable levels of timber harvest, massive road-building to make the forests accessible for logging equipment, and destructive mining and oil and gas development. In addition, decades of fire suppression has led to changes in the forest stands that make them more vulnerable to insects, disease and—paradoxically—catastrophic fire.

National forests and grasslands represent some of our wildest and most intact ecosystems. Now their importance in protecting the web of life has grown because these forests and grasslands are increasingly becoming isolated islands of natural habitat in a sea of expanding development.

At present, the health and ecological integrity of our National Forest System are threatened not only inside national forest boundaries, from off-road vehicles, logging, energy development, and road-building); they are also increasingly under assault from human activities outside federal land boundaries. Most notably, global climate change is expected to profoundly affect even the largest and most pristine forest ecosystems, however far they may be from human settlement.

Even as our national forests are undergoing changes in response to climate disruption, the Forest Service

itself is exhibiting signs of change as top agency officials are prioritizing climate adaptation and watershed conservation in the new guidelines and regulations. Given the urgency of climate change and other threats facing our nation's wildlands and habitats, these signs of change come as welcome news. Nevertheless, true agency change and land management reform will only be achieved when policies and statements issued inside the Beltway are made real in plans and actions on the ground. Forest and grassland activists have a tremendous opportunity to engage locally and regionally with the Forest Service—both as partners and as watchdogs—to ensure that the agency carries out land management in a way that truly safeguards our nation's forests, grasslands, water, and wildlife in a rapidly changing world.

THE AMAZING POWER OF AN INDIVIDUAL

The landscapes included in our National Forest System are some of the most scenically spectacular and biologically diverse and important lands on our continent, if not the planet.

During the 35 years since the passage of NFMA thousands of advocates have become involved in the planning process for their national forest or grassland. Often they became involved to protect a place on these federal lands that was special to them. Frequently they had no formal background in forestry, wildlife, range science, or planning. They became involved simply because they cared.

And these advocates have been very successful. Behind every designation of a wilderness area or a Wild and Scenic River is a forest advocate. Trails have been constructed, native species have been protected, habitat has been improved, and off-road vehicles have been reined in, simply because committed forest and grassland activists became involved in the planning process and engaged the Forest Service.

These activists have created a protected legacy that will live on after they are gone. Many of them have remarked that their efforts to protect the land, water, and wildlife have been among the most rewarding work they have ever undertaken.

But the work to protect these important lands is not done. Laws alone do not protect wild places, quality habitats, unique and endangered species, wild rivers, or native plants. Every generation must do its part to ensure that this legacy of wild America remains thriving.

Now we must also face the uncertain future of a rapidly warming world. With the impacts of global climate change beginning to be felt across all our treasured landscapes, now is the time for forest activists to advocate for changes to national forest management that will help vulnerable plants, animals, and whole ecosystems adapt to the impacts of climate change.

> "NEVER DOUBT THAT A SMALL GROUP OF THOUGHTFUL, COMMITTED, CITIZENS CAN CHANGE THE WORLD. INDEED, IT IS THE ONLY THING THAT EVER HAS."
>
> MARGARET MEAD

Every American is an owner of our national forests, grasslands, and other public lands. As Woody Guthrie said so poetically (and correctly), "This land is your land, this land is my land." It is our right and responsibility to safeguard our natural heritage for current and future generations to explore and enjoy.

Thanks to the provisions of NEPA and NFMA and the regulations that stem from them, the Forest Service is legally obligated to engage the public in its planning processes. As a result, people like you have protected and can continue to protect important wildlands and habitats. The power to insure proper management of our national forests and grasslands is in your hands.

ADVICE TO A FOREST ADVOCATE GETTING INVOLVED IN NATIONAL FOREST PLANNING

It is a major challenge for any individual to get involved in something as intricate as national forest planning and achieve a successful outcome. But many, many times we have seen dedicated forest activists do just that. Here are some of the ingredients of those successes.

- They got involved early, they understood the process, and they made their comments count.
- They often had on-the-ground knowledge of key parts of their national forest. There is no substitute for the knowing the landscape. Knowing where things are will enhance your confidence, credibility, and effectiveness. Plus, your passion for a special feature or experience on the forest is a valuable tool in persuading others to protect what's important.
- They reached out and involved a diverse and knowledgeable group of supporters and allies.
- They worked in a collaborative way with Forest Service staff and others, but always remained an advocate for their point of view.

- They treated the process as both a technical one and a political one. Participating in the forest planning process may seem to be primarily a technical process and your interaction with the Forest Service may reinforce that notion, but you should never forget that it is equally a political process.
- They developed a compelling public story of what they wanted to accomplish and they communicated it to both the Forest Service and the interested public.

This handbook is designed to help point your way to developing a successful effort along these lines.

Some more recipes for a successful campaign are available here.

A LONE ACTIVIST? NO, YOU HAVE TO O-R-G-A-N-I-Z-E

While many forest protections efforts, at their core, stem from the work of a single advocate or a small group of advocates, they are rarely successful without allies. Generally, the more allies you have, the greater your odds of success.

To be successful will require you and your allies to reach out to potential partners and others who might help you gain expertise, credibility, and political power.

We would like to share with you some ideas from our best organizers about how you might team up with others who share the vision you have for your national forest or grassland.

IDENTIFY YOUR OWN LEADERSHIP STORY

Think about how you and anyone else working with you to kick off this campaign are going to talk about this campaign. It's important to identify your vision for the future of the forest you wish to protect and speak about that vision in a compelling way so that you connect to the values of others in the community. Your work to recruit others will depend on your ability to motivate others to join you in action.

It will be important to talk about your campaign in terms of commonly-held values and your desired outcome, rather than the process. Articulating these values and your desired outcome is more motivating. You may want to consider referring to your work as something other than "being involved in a forest planning process." For instance, you might call it a "Forest Sanctuary Campaign" or "Future Forest Protection Campaign"—phrases that are more evocative but still communicate to potential supporters that your primary vehicle for achieving that vision is the forest planning process.

For more tips on telling your personal story see this.

BUILD A LEADERSHIP TEAM

To start organizing your campaign, you need to identify potential leaders and recruit them to join you in this work. Think about the types of knowledge (e.g. wilderness areas, wildlife habitat), skills (technical expertise, mapping, policy, media organizing), and connections (with agency officials, scientists, community members, representatives of groups you want to partner with, etc.) that you will need to have a successful campaign. For example, if your strategy involves engaging likely forest supporters in three key areas—two rural and one urban—this should influence the makeup of your core leadership team. Identify people who may have that knowledge, those skills, or connections.

Your recruiting strategy should focus on helping you find people who have either experience in this work, the willingness to learn, and an ability to make a significant time commitment and to stay involved for at least six months to a year, if not longer. It also helps to look for leaders who are open to talking to and recruiting others to join the campaign. If a leader has a strong personal network, that is particularly helpful. It's your job to find people with the right mix of knowledge, skills, time, energy, and enthusiasm for talking with others to fill out your team.

For ideas on how to build your forest campaign leadership team, see here.

For ideas on how to recruit people, see One-on-one Meetings.

POWER-MAP YOUR TARGET, ALLIES, AND OPPONENTS

Once your team has been assembled, you will want to take time to do a "power map" of your targets that will help to identify your allies, your connections to those allies, your opponents, and the various routes to pressure or influence your target. In most cases the primary target—the key decision maker—is probably the Forest Supervisor. From there, you can identify the right mix of tactics to engage your target in internal discussions, outside pressure tactics, and block the efforts of your opponents.

For more ideas and information on how to power map and then organize the rest of the known world, see this.

WHAT YOU SAY AND HOW YOU SAY IT: COMMUNICATION MAKES A DIFFERENCE

A forest planning campaign has at least two elements. One is technical, working with agency professionals, providing comments and advocating specific management directives to change Forest Service's plans for a specific national forest. The second is political, reaching beyond Forest Service professionals and persuading a larger

group of interested individuals to lend their support to your efforts. This second element is equally important as the first: a large, diverse, and ever-expanding group of supporters, political leaders, and agency decision-makers are much more likely to support your vision.

Strategic communications through the media is one of our most powerful grassroots organizing tools: moving people to action, influencing public opinion, and moving decision-makers. Our opponents understand the power of the media—the timber and development industries spend millions of dollars on advertising, marketing, and public relations each year.

How do you craft a message that helps persuade such potential supporters? What is the best way of communicating that message? That calls for a Strategic Communications Plan. Here are a few ideas from our communications experts on how to develop one.

Develop a Strategic Communications Plan by following these three steps:

- Target the right audiences
- Develop effective messages
- Implement media tactics

It is critically important to think through these steps in order. The audience will influence the tactics and the message so that media outreach strategically builds the campaign.

STEP ONE: TARGETING THE RIGHT AUDIENCES

Ask yourself: Who are you trying to reach? Keep in mind that the general public isn't a strategic target. Targeting everyone is not a viable strategy; so try to narrow the focus to a few key groups. An easy way to do this is to divide the public up into categories: existing supporters, likely opponents and potential persuadables. Your internal communications should focus on motivating and mobilizing your supporters. Your external communications through the media should focus on persuadables. It is generally not worth the time to use the media to try to convince your opponents.

The persuadables are likely to be individuals who use the forest or benefit from it, and would likely approve of the management direction that you are advocating but are not currently actively involved in the forest planning process.

For a national forest plan, supporters may be environmental group members who hike or recreate in the forest; persuadables may be people not affiliated with a conservation group who hunt and fish, live near, or get their water from a national forest. Opponents might be destructive timber or fossil fuel companies.

Sometimes groups or individuals with whom environmentalists have disagreed in the past might nevertheless be potential persuadables in a new forest or grassland protection effort. Carefully review the potential benefits of your vision for land, water, and wildlife, with an eye out for potential allies and persuadable audiences.

How will you reach them? Certain media reach different audiences. Make sure that the outlets you focus on reach the target audience.

STEP TWO: DEVELOPING EFFECTIVE MESSAGES USING "FRAMING"

A frame is simply how an issue is presented. A good frame presents a question in such a way that any reasonable person in your target audience would agree. For example, the industry frame often heard on forest issues is "jobs vs. environment." When posed that way, most people will choose jobs. To win, the issue must be reframed so that the focus is on the other benefits of good forest management—clean air and water, scenic preservation, and opportunities for enjoyment. Examples of effective framing might include "harmful logging pollution vs. clean water" or "corporate giveaways vs. outdoor family traditions."

Messages should flow naturally from the frame. The most important thing to consider when crafting messages is how the values, goals, and outcomes of the campaign can connect to what is good for everyone. What will resonate with the public, and especially with the target audience?

For some ideas on messaging, see here.

For how to talk about the importance of National Forests, see here.

For examples about how to talk about climate change and building Resilient Habitats, go here.

Message tips:

- *Remember that the public message is different than what will be submitted in official comments to the Forest Service. Make an effort to keep the language accessible for people who are not environmentalists or forest experts. Some examples are in the chart below.*

DO SAY	DON'T SAY
Wildlife, plants, and animals	Species
Natural areas, natural systems, and wild places	Ecosystems
Pollution and toxins	Greenhouse gasses and CO^2
Climate disruption and climate change	Global warming
Logging, mining and water pollution	Non-climate stressors
People	Humans

- *Avoid using acronyms.*
- *Don't let the public message get bogged down in discussions of process. Instead, keep the focus on the end result and commonly-held values, including clean water and sustainable amenity-based jobs.*
- *People should come first in your messaging. When talking about extreme weather incidents or safety issues like fire prevention, make sure to recognize those affected and the need for community protection.*

STEP THREE: IMPLEMENT MEDIA TACTICS

It's best to think like a reporter when planning media tactics. Reporters are people, too, and they have to answer to their bosses, the editors. So from the beginning, think about what criteria makes news. Pitch your story in terms of one of these time-honored criteria, and it's more likely to get covered. Here are some tips on how to do that.

A BRIEF INTRODUCTION TO THE FOREST PLANNING PROCESS

Forest planning occurs under the National Forest Management Act of 1976 (NFMA) and related regulations. NFMA sets out a process and framework for planning and approving management activities on each national forest. The law requires the Forest Service to assemble interdisciplinary teams to prepare forest plans for each national forest. The resulting plans provide for multiple use and sustained yield of goods and services from the National Forest System in a way that maximizes long-term, net public benefits in an environmentally sound manner.

Forest plans guide all natural resource management activities and establish management standards and guidelines for the national forest. They determine resource management practices, levels of resource production and management, and the availability and suitability3 of lands for resource management.

NFMA also requires public participation in the planning process as well as open access to important information regarding the economic and ecological status and trends of national forests.

NFMA requires the Forest Service to exclude lands not suited for timber production and mandates planning for the conservation of species and their ecological communities—a unique provision with far-reaching impacts due to all other resource management activities needing to be carried out within the frame of species conservation.

There are two levels of planning through which the National Forests must proceed:

- The 15-year Land and Resource Management Plan (LRMP) that defines what management actions can take place across the entire forest (such as zoning)
- Individual project plans that describe specific detailed actions planned for a small area of the forest (and are consistent with the LRMP); i.e., a sale of timber, etc.

Each level is subject to all the various laws and administrative guidelines.

Many national forests and grasslands are now operating under long-outdated LRMPs based on environmental, economic, and social information, and do not plan for climate change. Although the Forest Service is by law required to revise these plans after no longer than 15 years, Congress exempted them from this requirement through legislation enacted in 2003.

Now these plans are being revised and the future management for all of our national forests and national grasslands is being rewritten. These new LRMPs will do everything from allocating lands that are suitable for logging and grazing, managing lands to retain their unroaded character, identifying candidate areas for wilderness recommendations to Congress, and conserving resources and allowing sustainable recreation. The forest plans will also identify specific standards and guidelines that will guide the day-to-day management and preparation of project plans. This is all important stuff!

A second law that governs forest planning is the National Environmental Policy Act (NEPA), enacted in 1969. A forest plan is subject to all the provisions of the NEPA during its development, revisions, or amendment.

For every "major" federal action, NEPA requires a detailed statement by the responsible agency on:

1. The environmental impact of the proposed action
2. Any adverse environmental effects which cannot be avoided should the proposal be implemented
3. Alternatives to the proposed action, including no action
4. The relationship between local, short-term uses of resources and the maintenance and enhancement of long-term productivity
5. Any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented

NEPA also provides for public notification and participation in the forest planning process.

This detailed statement required under NEPA is called an Environmental Impact Statement (EIS). NEPA requires that the Forest Service prepare an EIS for the forest plan that includes a reasonable set of alternatives including a proposed action ans an analysis of the environmental impacts for each alternative. The agency is not required to look at every conceivable alternative, only those reason-

able ones that will meet the same goals and objectives as the proposed one.

While NEPA requires the agency to consider only the environmental impacts of its decisions, it does not mandate that they execute any specific decision nor choose the alternative with the lowest environmental impact.

As a part of this process, the Forest Service will identify a proposed action or a preferred alternative that they plan to implement after the planning process is complete. Knowing what the Forest Service plans to implement is of great value to the activist. If there are adverse impacts to their plan it is often easier to organize opposition if it is known that without any change of direction this is what the Forest Service intends to do.

For a more detailed look at the National Environmental Policy Act and the regulations that implement it, an activist's guide to NEPA is available here.

WHAT YOU CAN EXPECT FROM THE FOREST SERVICE

To best engage in the planning process, it is useful to understand the basic timeline for the development of a forest plan. The timeline will often stretch 3 to 5 years in length.

Forest planning proceeds in a linear sequence. The planning processes most relevant to developing forest plans that safeguard public resources are:

- Public outreach
- Scoping
- Preparation of the draft Environmental Impact Statement (DEIS), including the development and analysis of the alternatives
- Reaching a final decision with a final Environmental Impact Statement (FEIS) and a Record of Decision (ROD)
- Initiating possible Forest plan amendments subsequent to FEIS and ROD completion

PUBLIC OUTREACH

In recent years, the U.S. Forest Service has made a considerable effort to transform forest planning into a more collaborative exercise, inviting stakeholders to participate well before the legally binding timetable of NMFA and NEPA begins.

The Forest Service may hold "stakeholder" meetings and other public forums prior to the commencement of the official scoping period for forest planning. This is your first opportunity to participate in a dialogue with the Forest Service. In this vein, forest conservation advocates can also ask the Forest Service to hold stakeholder meetings to deal with issues or questions of particular concern. A key step to this early involvement in the planning process is to contact your national forest and ask to be placed on their mailing list for forest planning.

This early collaboration can take several forms, such as soliciting input from stakeholders prior to developing issues to be analyzed in the environmental documents, or forming specific subject matter committees. These organized planning committees often tackle single issues such as recreation, vegetation management, water protection, wilderness recommendations, etc. This is a good time and place to discuss with the Forest Service issues of importance to you and to present any research that you might have gathered.

Early engagement in the collaborative planning process provides time to build relationships with Forest Service planning staff and make a convincing case for protection of valuable resources. These relationships can be a key to getting desirable results down the road.

However, participation in this process can sometimes be very time-consuming—time that might be better used in organizing your forest campaign. When engaging with the Forest Service process it is best to have a realistic plan for what you want to accomplish and how you intend to use the process to accomplish it.

It is during this initial phase that you will want to work with other conservationists and allies to build a working coalition.

For tips on how to build a coalition and how to be successful in the public outreach phase see this.

SCOPING

Scoping is the process the agency undertakes to determine the "scope" and significance of issues associated with revising an existing forest plan.

The Forest Service is required by NEPA and its implementing regulations to notify interested individuals and organizations about its proposed forest plan revision and solicit comment.

The forest plan scoping process formally begins when the Forest Service publishes a Notice of Intent (NOI) in the Federal Register, describing their intention to revise the existing forest plan. If you are on the national forest's mailing list you will get a "scoping notice" in the mail or via email that briefly describes the proposal and requests your feedback.

Scoping is your second opportunity to participate in a dialogue with the Forest Service about your interests in the planning process, and offers an opportunity to reestablish your interest in the forest plan. It is also be an opportunity to become acquainted with agency officials who will be directing the forest plan process. Get to know them and expect to build relationships with Forest Service planning staff. Such contacts will allow you to better make your case for protecting valuable resources.

During this period the agency may also host a number of public meetings to collect comments from the public. They will also solicit written comments to be submitted in the mail or by email. It is critically important to your work that you provide information to the Forest Service that describes all of the issues of concern to you in your national forest or national grassland. It is also critically important that your comments be in writing and submitted within any imposed deadlines. Keep a copy as proof of your submission.

For more hints of how to be successful in the scoping phase see this.

DRAFT EIS (DEIS)

After reviewing scoping comments from the public, local governments, and other agencies, the Forest Service will produce a draft EIS for the forest plan, including the analyses of a range of planning alternatives. Preparation of this document can take as long as a full year. If you have submitted scoping comments, the agency is obligated to send you a copy of the draft for further review and comment.

For hints on how to read a Forest Plan see here.

The Forest Service will provide a formal notice of the comment period when it sends you a draft EIS. This comment period lasts 90 days. The agency is required to publish notice in a newspaper "of record" that the EIS is available for review and the review period begins on the day after publication. During this period the agency should also host a public meeting or series of meetings to collect comments from the public. If the agency does not plan to hold a public hearing, you can request one.

A public hearing is an excellent opportunity to demonstrate strong public support for your preferred alternative. Many people will not take the time the file written comments on a plan, but they will stand up and give a two- or three-minute public statement expressing their concerns. A public hearing is also a way to help create a media event around the issues in the plan. A demonstration, press conference, and strong public testimony against a development proposal can create a powerful media message and put public pressure on the Forest Service to adopt a stronger pro-environment decision.

Formal written comments on the DEIS are the most important public input the agency will receive in the entire forest plan process. The DEIS with its preferred alternative is where the Forest Service describes its position on forest and grassland management. Make sure your comments are well written and cover every issue of importance in detail with suitable references. You may ask for an extension of the comment period. You can often enlist the help of scientists, Sierra Club staff or volunteers, or other conservation organizations to help write comments. You may want to prepare comments on behalf of several organizations. You must submit your comments on or before the deadline or it will be rejected.

Early in the draft environmental impact review period you will need to decide if you want to support one of the alternatives studied by the Forest Service. If one of their alternatives also reflects your desired outcome, then you should rally public support and the support of public officials around that specific alternative and try to get the media to editorialize in favor of it. If none of the Forest Service alternatives meet with your approval, then you will need to create and name your own alternative and rally support for your alternative. For example, if there is no acceptable Forest Service alternative, you may want create a "Citizen's Forest Protection and Restoration Alternative" or a "Citizen's Clean Water and Wildlife Protection Alternative". Ask that your alternative be included in the final environmental impact statement and that it be selected as the Forest Service preferred alternative. If you can rally massive public support, media support, and public official support for your alternative it will make it more difficult for the Forest Service to ignore your input and stick with its inadequate preferred alternative.

For more hints on how to be successful in the phase of commenting on the draft EIS see this. In addition, we have posted copies of effective forest plan comments here.

FINAL EIS (FEIS) AND RECORD OF DECISION (ROD)

After the Forest Service reviews the public comments and makes any changes it finds necessary to the DEIS, it will send out an FEIS and Record of Decision (ROD). The cover letter and decision document will include the deciding official's rationale for choosing the preferred planning alternative. The decision document and FEIS will also include a response to comments collected during the comment period. Following the publication of the FEIS and ROD, the public has 45 days, from the date the decision is signed, to administratively appeal the decision.

After the final decisions have been made, if you haven't been successful in getting the Forest Service to change their position, and you have done your work throughout the planning process, then opportunities exist to formally appeal the decision and ultimately to take the Forest Service to court.

For more hints on how to be successful in the phase after the release of the Final EIS and ROD see this.

For information on how to appeal a poor decision see here.

POSSIBLE LRMP AMENDMENTS

The Forest Service can amend forest plans to take into account changing resource conditions and/or societal needs. Forest plan amendments are subject to the same planning and public participation requirements as the full forest plan, and can be used to update already-adopted plans in order to improve their ability to address the impacts of climate change or other matters.

Typically, we do not have the same opportunities to interact with forest plan amendments as we do the forest plan proper. It is best to let the Forest Service know that you want to receive timely notice of any forest plan amendment being considered.

This phase of the process will be on-going until the forest plan is updated 15 or so years into the future.

For more hints on how to be successful in the Forest Plan Amendment phase see this.

A PRIMER ON "CLIMATE SMART" MANAGEMENT OF NATIONAL FORESTS AND GRASSLANDS

One of the newest challenges conservation advocates face is making sure the new planning direction for our national forests and grasslands reflects the best science and conservation practices to deal with the challenges and stresses posed by existing and projected climate change.

The U.S. Forest Service has adopted a clearly stated policy to address the impacts of climate change across its operations. In July 2010, the agency released its *National Roadmap for Responding to Climate Change* wherein the agency commits to "[M]anaging for resilience (to climate change) in ecosystems as well as human communities, through adaptation, mitigation, and sustainable consumption strategies."

Empowering forest and grassland managers to safeguard our public natural resources in the face of climate change requires their having clear management plans and goals to that end. To assist the agency in developing such plans, advocates should engage in the forest planning process.

But what does this mean? How should the Forest Service manage our federal lands for climate resilience? What does it mean to have resilient habitats? To answer questions like these, we've included the following primer on the subject of climate change.

CLIMATE CHANGE

While climate has always varied, the degree and rate of climate change humans are causing is unprecedented. The geologic record indicates that the magnitude and rate of climate change humans are now causing had previously resulted in high levels of extinction and massive changes in life on Earth. Climate change is being driven by increased carbon dioxide in the atmosphere as a result of extracting and burning fossil fuels such as coal and oil and gas, as well as by land-use changes like deforestation in the tropics. Even if we could dramatically slash greenhouse gas emissions immediately, the impacts of climate change are already being felt and some further climate change with even more dramatic impacts is inevitable.

Climate change will have deep, wide, profound, and long-lasting impacts on the American landscape. Warming temperatures are probably the most notable and often-cited change in our climate. But in addition, patterns of both the timing and amounts of precipitation, and whether it falls as rain or snow, are changing. The extremity of weather events, humidity, wind and the timing of seasons will be affected. Climate change will affect water balance, species composition, and other elements that underlie ecosystems from the most remote wilderness to the most heavily managed forest. All these combined changes in turn affect the distribution and abundance of varied species, and interactions between them.

These changes will sometimes be abrupt and lead to noticeable and often profound alterations in these eco-

systems as they reorganize themselves in response to these impacts. The precise effects climate change will continue to have on landscapes cannot be known, nor can the responses of species that inhabit those landscapes. Some species will benefit while others will suffer, or even go extinct, while whole new ecological communities emerge, depending in part on what management actions are undertaken.

While we do not yet know the specifics, modeling and other tools can give us a clear-enough picture of what a future affected by climate change might look like. Scientific studies can help identify the protection and management solutions the Forest Service should put in place now to protect the resiliency of species and wildlands in the near- and longer-term future. We also know that the impacts of climate change will exacerbate existing stresses on habitat such as habitat fragmentation, commercial logging, mining, and the introduction of toxics. Managing forests and grasslands in a "climate smart" manner can help ecological systems, and the human communities that depend on them, adapt to the impacts of climate change.

The size of our National Forest System, the location of individual national forests and grasslands, and the resource management expertise of U.S. Forest Service managers makes these lands crucial to safeguarding America's outdoor heritage in the face of climate change.

SOME EXAMPLES OF CLIMATE CHANGE IMPACTS ON FORESTS AND WILDLIFE

The effects of climate change are already being seen across the landscape from protected areas to more developed lands. They are occurring at landscape scales and over relatively short timeframes.

- According to the Intergovernmental Panel on Climate Change, global average temperatures have risen by 1.5˚F and can be expected to rise another 2˚– 11˚F, depending on emission levels. The IPCC projects that these levels could lead to the extinction of 40% or more on the species on earth unless climate change is reversed and mitigation and adaptation measures are taken.
- Temperature, moisture and wind in turn all interact to affect the frequency, extent and intensity of fire, a powerful influence on our national forests and grasslands. Scientists project that increases in relative humidity will increase the risk of wildland fires in the Western United States.
- Research on undisturbed forest stands over 200 years old in Colorado, Idaho, Arizona, California, Oregon, Washington and British Columbia showed increases in tree mortality coupled with significant decreases in regrowth, with regional warming trends suspected of being the dominant contributor to mortality.
- In the Tahoe Basin straddling California and Nevada, warming temperatures are promoting decreased snowfall, earlier snowmelt, increased rain and increased intensity in precipitation to alter the hydrology of the region .
- Warmer temperatures and drought have allowed mountain pine beetles in the West to reproduce and mature more quickly, with greater survival over the winter, and thus spread to kill vast forests. In the Northern Rocky Mountains, pine beetles have moved to higher elevations, contributing to the ongoing loss of whitebark pine (whitebark pine have now been found to be warranted for listing as a "threatened species" but precluded from formally being listed as the agency lacks the funds to do so), a key food source for grizzly bears .
- Between 2002 and 2004, researchers documented a die back of over 95% of all non-seedling pinyon pine in Bandelier National Monument in New Mexico and the loss of over 90% of mature pinyon individuals, at landscape scales, across much of the Jemez Mountains. This loss, in which the species did not move to more suitable habitat, was attributed to climate induced stress.
- Largely undeveloped, low elevation forests in Southeast Alaska have seen the loss of approximately 500,000 acres of yellow cedar. The loss has been attributed to warmer winters that lead to decreased local snowpack and increased freeze-thaw conditions detrimental to tree health.
- In Wyoming, research on the Clark's Fork migratory elk herd suggests that decreased nutritional quality of summer forage, attributable to shorter springs, has led to a 22% decline in the number of pregnant cows, with a corresponding decline in calf production.
- In the wilderness of the Alaska Arctic, increased incidences of lungworm infections, corresponding with warmer temperatures, in musk ox has made herds more vulnerable to predation by grizzly bears and wolves, putting the future of the species in the region in question.
- Across the Arctic, where there is little human development, sea ice habitat crucial for polar bears, walrus, seals and other species is decreasing at the rate of 8.5% per decade with no signs of reversal.

CLIMATE SMART MANAGEMENT — CREATING RESILIENT HABITATS

America has a long and proud conservation history. Our federal lands and the treasured landscapes they contain are the envy of the world. But as scientific knowledge has evolved over the last century it has illuminated new threats—especially climate disruption, which threatens our nation's outdoor legacy and requires new conservation approaches.

Rapid changes in the earth's climate are well underway, with more to come. In response, our world's ecosystems are changing in a variety of sometimes sudden and alarming ways. Even if we dramatically slash greenhouse gas emissions immediately and avoid the worst effects of climate change, the natural world will still be buffeted by temperature increases, altered precipitation patterns, more extreme storms, and other unavoidable effects. These climactic and ecological changes are now fundamental drivers that must be considered in all land management and planning activities. Our national forests and grasslands must be conserved and managed to promote the ability of both species and ecosystems to be resilient—to "bounce back" and adapt—and retain their ecological functions, benefits, and biodiversity in the face of a changing climate.

Climate change will continue to adversely affect the quality and quantity of fish and wildlife habitat and recreation on America's forests and grasslands for the foreseeable future. Preserving and managing these habitats to adapt to climate change is essential to supporting America's hunting, fishing and wildlife watching economy. And as drought, wildfire, and other climate impacts stress the nation's water resources, the security and proper management of watersheds will be essential.

By acting now to improve the resilience of our nation's habitats to climate change, we can help our national forest and grassland ecosystems adapt, help species survive, and protect our own lives and well-being. But to fully protect wildlife and wild places for future generations we need to shift the way we think about conservation and start planning for a changing future. Today science tells us that our special places and habitats cannot be protected in isolation.

Fortunately, the science on building resilient habitats is surprisingly clear. We know that to build habitat resilience, we must protect large wild spaces such as parks, national forest unroaded areas, and wilderness areas, and connect them via wildlife corridors. In addition, we need to restore and protect natural areas that are not in a pristine wilderness state to provide buffer areas and round out this climate refuge network. We also must reduce non-climate stressors such as habitat loss, logging, mining, invasive species, off road vehicle impacts, and pollution, and apply "climate-smart" management that incorporates the latest scientific findings.

Science also instructs us that the safest and most sustainable way to recover our climate is to build up the capacity of natural systems—soils, forests, prairies, and wetlands—to soak up and store long-lived carbon dioxide (CO^2) from the atmosphere. Through this process of sequestration, coupled with programs to slash the new emissions of greenhouse gases, we can return our planet to safer levels of atmospheric CO^2.

Keeping our national forests and grassland healthy is essential for protecting our treasured landscapes, and also our communities. Wild places including wetlands, flood plains, prairies, and forests play a vital role in soaking up, filtering, and storing water; they provide drinking water for thousands of Americans. These functions will help communities withstand the floods, droughts, and intense storms that scientists say will worsen as the climate changes. In addition, a healthy natural world is good for the economy. Outdoor recreation, from bird watching to hiking, kayaking, and other human-powered activities, provide millions of dollars and jobs for local economies.

The planning process is a great opportunity for us to begin putting needed conservation strategies and tools into action. While we must keep an eye on the long term and try to keep options open for changing course over the span of this century and beyond, it is equally critical and less daunting to focus on planning and management over the 10-to-15-year lifespan of a forest plan.

Every management plan for our public and private lands, waters, forests, prairies, and coasts is an opportunity to secure resilient habitats. Working with the Forest Service, elected officials, and other leaders to develop and implement effective climate-smart management practices must now be the priority.

National forest lands can provide the important ecological and economic values they have always maintained—biodiversity, clean water, wildlife habitat, and human recreation—even as they inevitably change along with the climate. The challenge is to minimize the adverse effects of these changes by helping forests adapt to climate change.

Success in forest and grassland planning will, more than ever, depend on active participation of people like you, not only in the process of a plan revision, but also in the implementation of these plans. These plans will guide

how our national forests are protected and managed for the next several decades. We have a huge opportunity to guide the future of our irreplaceable forests, rivers and wildlife habitat. Through strong forest and grassland plans, you will literally be saving our world for future generations. How often do we really get a chance to do that?

For many more specific recommendations on how to create resilient habitats and climate smart management on your national forest see here.

For information on the Forest Service's Roadmap and how to use it in forest planning, see here.

IT'S UP TO YOU: NEXT STEPS

The next steps are really up to you. National forest planning is a real opportunity for interested individuals to make a lasting difference in the management of a national forest they care deeply about.

Let's protect these prairies, lakes and rivers, mountains and deep ancient forests, and the deer, elk, bison, bears, wolves, fish and many other creatures residing in them before a changing climate and other threats put all of this at risk. You have the voice, the power, and the passion to make sure the federal agencies do their job correctly, and to collaborate with them whenever possible. That's why we've created this handbook, so that you can become informed and start working with the Forest Service, your community, scientists, conservation partners, and other concerned citizens to protect your national forests from climate change and other threats.

If making a real difference sounds good to you, why not start by contacting your national forest or grassland on the phone, online, or in person, and express your interest in getting on the list of people interested in their development of a new forest plan.

"BUT NOW," SAYS THE ONCE-LER,

"NOW THAT YOU'RE HERE,

THE WORD OF THE LORAX SEEMS PERFECTLY CLEAR.

UNLESS SOMEONE LIKE YOU

CARES A WHOLE AWFUL LOT,

NOTHING IS GOING TO GET BETTER.

IT'S NOT.

FROM "THE LORAX" BY DR. SEUSS

Then it is time to sit down and do a little bit of reading about the forest or grassland. The current land use plan is a good place to start. Think about what issues, places, and activities most interest you about these areas, and who might be willing to join with you in working to protect your national forest or grassland.

We hope that this handbook will provide you with a good start. As you get further involved we'd love to hear back from you about what works, what doesn't, and other ways in which we can help. We can probably help you find other like-minded folks who care about their national forest and who might be able to assist in your efforts.

Sierra Club forest and grassland activists have been making a difference for more than 100 years. We'd like to help you make a difference, too.

Good luck and successful journeys.

LONGER RANGE PREDICTIONS OF ECOLOGICAL CHANGES FROM CLIMATE CHANGE

- Under likely climate change scenarios, forecasts have predicted the complete loss of lodgepole pine forests in the Pacific Northwest during the second half of this century.
- Models predict that climate change could reduce western trout populations by as much as 58% over the next 70 years.
- Researchers with the U.S. Forest Service have predicted that sea level rise due to climate change will result in the loss of between 20% and 70% of current intertidal habitat along the California Coast.
- In the Southeast coldwater streams capable of supporting trout are predicted to decline between 65% and 99%.

NATIONAL FORESTS

THE IMPORTANCE OF PROTECTING NATIONAL FORESTS

The United States is home more than 193 million acres of national forests and grasslands. These places give Americans access to some of the most spectacular places in the world. Our national forests are unparalleled, diverse habitat for some of our most treasured wildlife.

These are the wild places and open spaces where we hike, camp, hunt and fish, where we seek solace and solitude, and where wildlife live and raise their young. They are the foundation of local economies, providing millions of jobs in recreation and tourism for people across the country. They are reservoirs for wildlife as well as reservoirs of freedom—and they must be protected.

PROVIDING CLEAN AIR AND WATER

Wild places like wetlands, flood plains, and forests play a vital role in managing our water resources, soaking up, filtering, and storing water for drinking, fishing, and swimming.

National forest lands are the single largest source of drinking water in the nation. According to the U.S. Forest Service, about 124 million Americans rely on national forests and grasslands as the primary source of clean drinking water.[1] More than 3,400 towns and cities depend on national forests for their water supply.[2]

Besides serving as would-be giant water filters, national forests do the same in cleaning up our air. Forests are major carbon sinks, helping trap climate-disrupting pollution.

DIVERSE NATURAL AREAS

Nearly three-quarters (73 percent) of the nation's ecosystem types are represented in our national forests. These natural systems are home to flora and fauna of all types, from the massive redwood trees and grizzly bears, to many small birds, insects, and flowers.

RECREATION AND THE ECONOMY

America's national forests and grasslands offer the single largest source of outdoor recreation opportunities in the United States.[3] According to the U.S. Forest Service, recreational activities on national forests and grasslands continue to make large economic impacts on America's communities, contributing $14.5 billion annually to the U.S. economy in 2011.[4] National forests attracted 170.8 million recreational visitors and sustained approximately 223,000 jobs in rural communities this past year.[5] Approximately 85 percent of the revenue generated from national forests comes from recreational activities—more than five times the amount generated by logging.[6]

OUR NATIONAL FORESTS NEED PROTECTION

We have a responsibility to protect wildlife and wild places and leave a better world for future generations. The natural legacy we leave our children and grandchildren depends on the steps we take today as stewards of America's wild places and wildlife. As part of our country's natural heritage, every American is part owner of these national forests.

We have a choice to make, whether to manage our public lands like a gift to future generations or as a giveaway for narrow and special interests. Ensuring that whole natural systems are healthy will help them survive new and growing threats, while protecting clean air and clean water for our communities.

1 The U.S. Forest Service—An Overview: http://www.fs.fed.us/documents/USFS_An_Overview_0106MJS.pdf

2 USDA Forest Service Strategic Plan for Fiscal Years 2004-2008

3 A Guide to Your National Forests and Grasslands, U.S. Forest Service http://www.fs.fed.us/maps/products/guide-national-forests09.pdf

4 "U.S. Forest Service Visitor's Report Shows Strong Continued Economic Impact and Customer Satisfaction of America's National Forests and Grasslands"—Press Release, August 9, 2001. http://www.usda.gov/wps/portal/usda/usdahome?contentid=2011/08/0342.xml&contentidonly=true

5 Ibid.

6 U.S. Department of the Interior and U.S. Department of Commerce, 1996 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation

RECIPES

RECIPES FOR A SUCCESSFUL CAMPAIGN

In order to design a winning campaign it is important to be thinking about how you will engage people in every stage of the work to identify the recommendations, the strategy, and tactics for engaging with the Forest Service and the broader community.

MEET WITH THE USFS PERSONNEL EARLY AND OFTEN

- Become familiar with and get to know key USFS personnel, particularly the forest supervisor and the chief of the planning team
- Determine the USFS update plan & schedule for the plan development
- Know which planning steps the public can engage in
- Expect the schedule to change often, so be proactive about keeping up to date with plan evolution
- Ask the agency for any information you need to help define your forest plan positions. Use the Freedom of Information Act if necessary.
- Set up special meetings with the agency for any reason you deem useful, including clarifying USFS positions, determining their rationale for positions, finding out what decisions have been made, etc.
- Consider show-me field trips to look at key areas and issues. This is a great time to nurture personal relationships with knowledgeable agency people in between formal comment periods.
- Look for opportunities to organize service outings to help the Forest Service on environmentally friendly projects such as trail work, restoration projects, or wildlife monitoring. These are fun ways to recruit new people, and the agency staff appreciates the help.

SPEND TIME DEVELOPING TOOLS TO COMMUNICATE YOUR RECOMMENDATIONS FOR THE FOREST PLAN IN A COMPELLING WAY.

- Identify ways to train and coach others to tell their personal stories in meetings in your community
- Develop a short and compelling PowerPoint that identifies your strategy, your recommendations, and how people can get involved
- Develop a website
- Create new media sites that engage your supporters and others in upcoming activities
- Create one or two compelling fact sheets related to the threats and the need for climate adaptation
- Engage as many people as possible in the forest plan process

DEVELOP AN OUTREACH PLAN THAT WILL ALLOW THE CAMPAIGN TO TOUCH A VARIETY OF PEOPLE/ GROUPS/INDIVIDUALS WHO CAN ENGAGE IN ONE OR MORE PHASES OF THE PLANNING PROCESS.

THESE GROUPS SHOULD INCLUDE:

- Partner environmental organizations
- Local community organizations in the area
- Scientists
- Hunters and anglers
- Recreationalists (hiking clubs, skiers, snowboarders, etc.)
- Supportive businesses
- Faith groups
- Native Americans
- Non-traditional organizations who have an interest in our issues

For information on how to work with different allies, see here.

For information on how to plan outings to your national forests, see here.

For forest campaign success stories, see here.

LEADERSHIP TEAM

BUILDING YOUR FOREST CAMPAIGN LEADERSHIP TEAM

A good campaign will build long-term local capacity of a committed group of forest activists who will work to protect the forest for years to come.

PLAN TO ASSEMBLE A LEADERSHIP TEAM

To start organizing your campaign, you need to identify potential leaders and recruit them to join you in this work. Your first step is to create a plan for identifying and recruiting people to form a leadership team made up of people who are willing and able to work on the forest plan process from start to finish.

The plan for your team should include writing a team charge that lays out the purpose of the team, creating a draft set of roles and responsibilities and a timeline for engaging others, and the timeline for holding your first meeting.

RECRUITING YOUR LEADERSHIP TEAM

Your recruiting strategy should focus on helping you find people who either have experience in this work or the willingness to learn, and the ability to make a large time commitment and stay involved for at least six months to a year, if not longer. It also helps to look for leaders who are open to talking to others and recruiting people to join the campaign. If a leader has a strong personal network, that is particularly helpful. It's your job to find people with the right mix of knowledge, skills, time, energy, and enthusiasm for talking with others to fill out your team.

Here are some helpful ideas of what to look for in the leaders you recruit to your team. You are looking for people with certain experience or knowledge, skills, and personal networks.

Experience – Knowledge:

- Can identify the land's *natural values*, such as trails, streams, scenery, wildlife/birds, outstanding scenic areas, or areas that are particularly undisturbed and resonant.
- Are familiar with the land's *past history* of conservation on that set of forests or forest such as:
  - Legislative Battles: Past legislative campaigns for wilderness protection, wild & scenic rivers, fights with the USFS over conservation issues
  - Administrative: The last forest plan development/campaign
  - Other issues such as mineral development, timber sales, etc.
- Are familiar with the *existing issues* that will effect the shape of the next forest plan, such as:
  - Reducing the cut volume
  - ORV abuse
  - Roadless area development
- Know the current *management direction* for the existing forest plan

Skills – Talents

- Have legal, policy or other experience reading technical documents
- Have organizing skills and experience working with people in the community—enjoy educating, recruiting, and developing leaders
- Have media skills—both traditional and new media skills—including skills as media spokesperson, writing letters-to-the-editor, op-eds, and/or skills as a blogger, regular Facebook or Twitter contributor, and the ability to create and update websites or use other social media tools

Relationships

- *Connections and networks* with other activists and citizens who may be directly affected by provisions included in a new forest plan
- *Connections and networks* with other activists and citizens who will want to engage in the forest planning process
- *Influence* with Forest Service decision makers

ENGAGING YOUR LEADERSHIP TEAM

Once you have recruited a team, you should plan to have a "launch meeting" or call, and then schedule regular meetings with the team.

To get a team up and running and working together well, it helps to schedule time to do the following:

- Clarify and agree upon the team charge
- Create norms for tracking process together
- Create a known decision-making process
- Create a set of sub-committees relative to your strategy to divide up the labor and engage a broader number of people

Such sub-committees might include (as applicable to each forest):

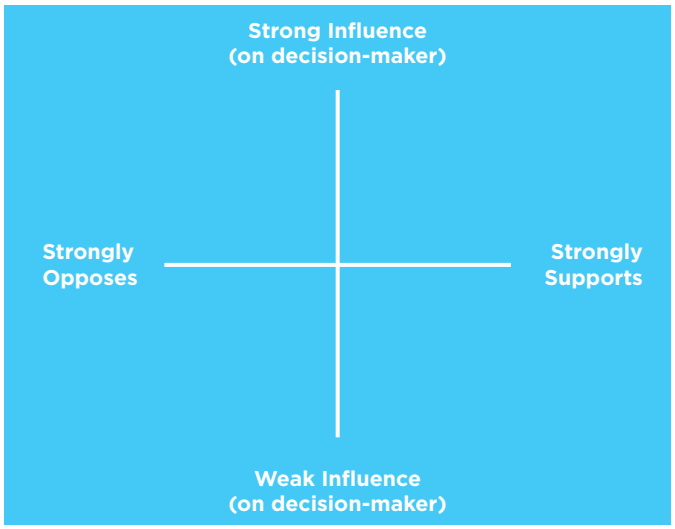
1. Action-based
   - Communications and media
   - Community Engagement
   - Outings, service trips, visits to objectionable projects (such as timber sales or road-building) and watershed monitoring
   - Coalition or campaign partnership outreach
2. Issues-based
   - Wilderness and roadless areas, mapping
   - Native plants, wildlife, and fisheries
   - Water issues, wild & scenic rivers
   - Grazing
   - Mining and mineral leasing
   - Access roads and trails
   - Recreational users: hikers, equestrians, and off-road vehicle users

POWER MAPPING

POWER MAPPING YOUR TARGET, ALLIES & OPPONENTS

It's helpful to take your leadership team through several strategy sessions, and engage in decisions related to defining your forest plan recommendations and strategy.

Once your team has done that, you will want to take time to do a power map of your targets that will help to identify your allies, your connections to those allies, your opponents, and the various routes to pressure or influence your target. From there, you can identify the right mix of tactics to engage your target in internal discussions, outside pressure tactics, and block the efforts of your opponents.



A POWER MAP PROCESS:

- Helps everyone think through the social and political context that impacts campaign success
- Creatively considers "influencers"—both potential allies and opponents
- Serves as a reminder and baseline for subsequently assessing and revising strategy
- Is a visualizing exercise that is about "seeing" power relationships and networks graphically

HOW IT'S DONE:

A. Power Mapping begins after the campaign has clearly identified its goals and organizers have identified the specific targeted decision-maker(s) they will work to influence. Thus, to begin any Power Mapping process, clearly state the campaign goals and targeted decision-maker.

B. Prepare a flip chart or other large piece of paper with a simple horizontal and vertical axis, as illustrated. The vertical axis defines the level of influence each person or organization has relative to your target decision maker. The horizontal axis indicates whether people support or oppose your campaign objective.

C. Place your Forest Service decision-makers at the top of the map. Then use post-it notes to place other individuals and organizations on the map. Consider the following:

- Other public officials—public officials often have strong influence with other public officials
- Leaders of organized community constituencies: church ministers, PTA chairs, neighborhood or homeowners associations, Chambers of Commerce, Rotary and other community service groups, "Friends of..." organizations, local union leadership, etc.
- Local corporate executives, business owners, non-profit Board members, etc.
- Wealthy individuals, financial contributors to community projects and candidates
- Leaders of interest-based constituencies: recreation clubs, hobby groups, special interest organizations, etc.
- Friends and family of the decision-maker

D. Identify unorganized constituencies; groups of people who are affected and could become engaged.

E. Use this Power Map to prioritize the campaign's effort to build relationships with grasstops influencers. It is also helpful in thinking through what kind of leadership, coalitions and mass mobilizing will be most effective.

OUTREACH

OUTREACH AND COMMUNITY-BUILDING RESOURCES

Americans have been working to protect our amazing mountains, ancient forests, grasslands, meadows, wild and scenic rivers, wildlife, and fisheries for centuries. Fortunately, we can build on this rich conservation history as we face the challenge of protecting our national forests from the greatest threat they have ever faced: climate change.

The good news is that we are not alone. There are many concerned citizens and conservation organizations who are also working to protect and conserve our natural resources. As you start to plan your forest campaign, look to these other people and resources in your community. Forest advocates can build relationships with scientists, hunters and anglers, hikers and skiers, outdoor recreational and tourism businesses, faith leaders, community groups, and others to help protect our national forests.

Below we give you a few ideas for reaching out to your community and building relationships with many conservation partners for your forest protection campaign. There are many guides to working with these different groups and communities. We don't attempt here to duplicate those, but provide a few resources and contacts.

THE AMERICAN PUBLIC SUPPORTS FOREST PROTECTION

It is heartening to know that the vast majority of Americans support protecting forests. As you plan how to reach out and talk to people in your community, it is important to know how people think about forests, the benefits of healthy forests, and the threats they face. Then you can be more effective in talking to people about why they should work with you to protect forests.

According to a poll by the National Association of State Foresters,

- Ninety-two percent (92%) of voters surveyed believe that helping keep the air clean is a "very important" benefit of forests, including 58 percent who believe it is "extremely important."

> **"FEW ARE ALTOGETHER DEAF TO THE PREACHING OF PINE TREES. THEIR SERMONS ON THE MOUNTAINS GO TO OUR HEARTS; AND IF PEOPLE IN GENERAL COULD BE GOT INTO THE WOODS, EVEN FOR ONCE, TO HEAR THE TREES SPEAK FOR THEMSELVES, ALL DIFFICULTIES IN THE WAY OF FOREST PRESERVATION WOULD VANISH."**
>
> JOHN MUIR, "THE NATIONAL PARKS AND FOREST RESERVATIONS," *SIERRA CLUB BULLETIN*

- A nearly identical 91 percent of voters assign similar importance to forests' role in filtering water to keep it clean.
- Seventy-four percent (74%) of voters surveyed say they support providing resources for ongoing forest management and protection, including 41 percent who say they'd like to see it increased.[1]

In April 2001, The Mellman Group wrote: "There is widespread and overwhelming support for protecting wild areas in national forests from logging, mining, and drilling for oil and gas. A strong majority of voters (67%) favor the Roadless Area Conservation Rule, with 49% saying they favor this policy strongly (19% oppose). Support for this ruling cuts across partisan and regional lines. Seventy-six percent (76%) of Democrats, 66% of independents and even 58% of Republicans support protecting these areas. Similarly support is strong in all regions of the country. Seventy-one percent (71%) of people from the Northeast, 68% of Midwesterners, 65% of Southerners and 64% of those in the West favor the rule to protect pristine national forestlands."[2]

In December 1999 and January 2000, pollster Linda Divall surveyed 1,000 registered voters and found:

- A majority in each region felt that the U.S. does not have enough permanently protected land in our national forests.
- Seventy-six percent supported the roadless areas protection proposal.
- Protections for roadless areas has broad support across political parties. Sixty-two percent (62%) of Republicans, 86% of Democrats, and 78% of Independents supported the roadless protection plan.[3]

CONSERVATION COMMUNITY

Perhaps the most obvious place to start looking for campaign partners is in the conservation community. Sierra Club volunteers have a great resource in other volunteers, staff, and local chapters and groups. You can often find interested people at your local chapter office, conservation committee, forest or wilderness or wildlife committee, or outings program. Find your local Sierra Club chapter and other contacts at http://www.sierraclub.org/chapters/

If you are an active forest advocate, you probably know many conservation groups in your area. There are many good conservation organizations who may be interested in working with you on your local forest plan. Look for state or local offices of The Wilderness Society, National Wildlife Federation, Defenders of Wildlife, American Rivers, or other environmental organizations. Many states have forest, wilderness, or river groups, and many communities have ecology centers, community centers, and hiking clubs where you may go for resources and networking.

The Heritage Forests Campaign is an alliance of individuals and organizations fighting to protect roadless areas in our national forests. Check out their list of allies to find someone near you: http://www.ourforests.org/allies/

Our Forests Our Future is a coalition of conservation organizations working on strong National Forest Management Act regulations. Check out their resources at http://wilderness.org/ourforestsourfuture

SCIENTISTS

Obviously, scientists can be an essential resource for information to guide your work on protecting national forests. Conservation organizations may have scientists on staff or advisory boards. Look for professors at your local university with expertise on forestry, wildlife, fisheries, water quality, etc. Scientists are often willing to review agency documents and provide comments for free or at a very low cost to conservation groups.

It may be helpful to review U.S. Forest Service (USFS) research publications and contact research stations (a partial list is available in Appendix X). Agency scientists at the U.S. Fish and Wildlife Service, National Marine Fisheries Service, or state fish and wildlife departments may be able to give you specific information about wildlife habitat on your national forest. Retired agency scientists may be even more helpful contacts to provide information on how the agency functions and where to find useful resources.

In addition, some scientists are willing to publicly advocate for responsible environmental protections. For example, on May 1, 2001, more than 200 scientists sent a letter to the Forest Service supporting protections for roadless areas on national forests, stating: "Scientific research has amply documented the greater health and resiliency of intact forest ecosystems versus those disturbed by roads and logging. Undisturbed forests are less susceptible to tree diseases, insect attacks, and invasion from non-native species, and are less likely to have suffered the adverse effects of fire suppression. These healthier ecosystems are in turn more able to withstand the effects of global climate change and act as refugia for sensitive wildlife and plant species, many of which are vulnerable to extirpation in more developed areas. Thus intact, forests can serve as reservoirs as surrounding landscapes become genetically impoverished."[4]

RESOURCES:

Intergovernmental Panel on Climate Change: http://www.ipcc.ch/

Forest Service Climate Change Resource Center (CCRC): http://www.fs.fed.us/ccrc/

Union of Concerned Scientists: http://www.ucsusa.org/

Heritage Forest Campaign Scientific Support: http://www.ourforests.org/public_support/#scientific

FAITH COMMUNITY

> *Teachings from many religious traditions describe God's hand in creating our beautiful and life-sustaining planet. They also encourage us to treat the Earth with reverence, respect, and in a sustainable manner. Moreover, people from all walks of life find spirit-nurturing sustenance in the wild, pristine parts of our world.*
>
> Hope in an Era of Climate Change; *Roadless Areas, in National, Forests* [5]

In 1999, faith leaders sent a letter to the Forest Service on the importance of protecting national forests:

> *"We value these untouched forests not only for the vital ecological functions they provide, but also because they so clearly reflect our Creator's handiwork. They reflect God's majesty, power, and beauty in a unique way, as do all of*

the amazing variety of creatures they shelter. Forests are like a temple constructed by God, where we can worship and draw close by marveling at God's endless wisdom and creativity... The Scripture makes clear that protecting God's forests, and the many aspects of creation they embody and protect, is not merely sound policy but holy obligation. The Scriptures tell us that the earth does not belong to us, but to God, and that we are the tenants charged with its care. [6]

Religious leaders and organizations have been some of the earliest and most effective conservation advocates. Some religious institutions and organizations have social justice or environmental committees who may be interested in partnering with you. Many churches and youth groups organize trips into nature to experience a sanctuary for contemplation and restoration. The Sierra Club has partnered with religious groups to lead faith outings into nature.

For example, In Los Angeles, Sierra Club staffer and long-time Catholic youth-group leader Juana Torres is working with the Los Angeles Catholic Archdiocese, and in the past has worked with Progressive Christians Uniting, to bring in new voices, perspectives, and ideas about how to care for the San Gabriel Mountains. Among the Sierra Club's activities in partnerships with these religious groups is leading outings into the San Gabriels.

In addition to your local religious institutions or organizations, here are some other groups who can provide more information:

National Religious Partnership for the Environment: http://www.nrpe.org/

Coalition on the Environment and Jewish Life: http://www.coejl.org/index.php

U.S. Conference of Catholic Bishops, Justice, Peace and Human Development: http://www.usccb.org/about/justice-peace-and-human-development/

Presbyterians for Earth Care: http://www.presbyearthcare.org/

"OUR VERY CONTACT WITH NATURE HAS A DEEP RESTORATIVE POWER; CONTEMPLATION OF ITS MAGNIFICENCE IMPARTS PEACE AND SERENITY."

POPE JOHN PAUL II, JAN. 1, 1990

Evangelical Environmental Network: http://www.creationcare.org/

National Council of Churches of Christ Ecojustice Network: http://nccecojustice.org/

Restoring Eden: http://restoringeden.org/

Buddhist Peace Fellowship: http://www.bpf.org/

HUNTERS AND ANGLERS

Hunters and anglers have been dedicated conservationists for centuries. They recognize the importance of wild forests in providing high-quality wildlife and fisheries habitat and hunting and fishing opportunities.

The Theodore Roosevelt Conservation Partnership conducted a poll of licensed U.S. hunters and anglers concerning their knowledge and beliefs about forest management and the value of wild areas. Included in their findings were that:

- Eighty-four percent (84%) of hunters supported (55% strongly and 29% moderately) efforts by sportsmen to keep the remaining roadless areas in national forests roadless.
- Eighty-six percent (86%) of anglers supported (48% strongly and 38% moderately) efforts by sportsmen to keep the remaining roadless areas in national forests roadless.

Many hunting and fishing organizations have been leading advocates for protecting national forests.

For example, the group Backcountry Hunters and Anglers has stated, "Our freedom to hunt and fish depends on habitat...These backcountry lands offer unmatched habitat security, a rare and shrinking feature crucial for popular big game species such as elk, mule deer, bighorn sheep, mountain lion, mountain goat, and bear. These areas tend to have the healthiest, most robust herds and grow the most mature bulls, bucks, and rams. Roadless areas are important sources of clean water and fish habitat. They are generally the healthiest spawning and nursery habitat for ocean-run salmon and steelhead and the strongholds of native fish such as bill, redband rainbow, and cutthroat trout. Clean, cold water flowing from high roadless areas feeds downstream fisheries for native and non native trout alike. Biology aside, roadless areas provide important social benefits such as peace and quiet, and solitude that we greatly value. Backcountry Hunters and Anglers want roadless areas to stay as they are—so our children and grandchildren can enjoy the fine hunting and fishing we ourselves have grown up with.[7]

CONTACTS:

Trout Unlimited: http://www.tu.org/

Ducks Unlimited: http://www.ducks.org/

Federation of Fly Fishers: http://www.fedflyfishers.org/

Pacific Coast Federation of Fishermen's Associations: http://www.pcffa.org/

Back Country Hunters and Anglers: http://www.backcountryhunters.org/

Theodore Roosevelt Conservation Partnership: http://www.trcp.org/

OUTDOOR RECREATION AND TOURISM BUSINESSES

There are many outdoor recreation businesses, tour companies, hotels, restaurants who rely on wild forests.

The Outdoor Industry Foundation published a report on Active Outdoor Recreation Economy which states that the outdoor recreation industry contributes $730 billion to the U.S. economy every year. It also:

- Supports nearly 6.5 million jobs across the U.S.
- Generates $88 billion in annual state and national tax revenue
- Provides sustainable growth in rural communities
- Generates $289 billion annually in retail sales and services across the U.S.
- Touches more than eight percent of America's personal consumption expenditures—more than 1 in every 12 dollars circulating in the economy.[8]

RESOURCES:

Outdoor Industry Foundation: http://www.outdoorfoundation.org/

Outdoor Industry Association: http://www.outdoorindustry.org/

Check out their member directory for a company near you: http://www.outdoorindustry.org/member/member-directory/default.aspx

LABOR ORGANIZATIONS

Most forest restoration projects have an easy labor connection because of heavy equipment operators, truck drivers, and the fact that culverts need to be manufactured, shipped, installed, and seedlings and seed need to be purchased for planting. You can look for companies near you that focus on this type of work and products needed to accomplish the work. Also, some local individual timber companies are more sustainably focused, such as those certified through the Forest Stewardship Council. Community-based timber companies often have better labor practices.

RESOURCES:

The National Network of Forest Practitioners: http://www.nnfp.org/index.php

Forest Stewardship Council: http://www.fsc.org/

AFL-CIO: http://www.aflcio.org/

United Steelworkers, Pulp, Paper and Forestry: http://www.usw.org/our_union/pulp_paper_forestry/

1 National Association of State Foresters (NASF), released on April 29, 2011, http://www.forestactionplans.org/about-action-plans/recent-news/-voter-attitudes-poll

2 http://www.ourforests.org/public_support/

3 *Ibid*

4 http://www.ourforests.org/public_support/scientist_letter2_050101.pdf

5 *Hope in an Era of Climate Change; Roadless Areas, in National, Forests,* Dominick A. DellaSala, Jim Furnish, and Eric Steinkamp, January 2011

6 *The Roadless Rule; The Struggle for the Last Wild Forests,* Tom Turner, Island Press 2009

7 *Ibid*

8 http://www.outdoorindustry.org/images/researchfiles/RecEconomypublic.pdf?26

OUTINGS

NATIONAL FOREST OUTINGS

A successful campaign can and should include working with volunteer outings leadership to leverage Sierra Club Outings to connect fellow and future activists, local politicians, and the general public with the wild areas in question.

Each year thousands of volunteers outings leaders take hundreds of thousands of outings participants on outings around the country—many of these in our national forests. These may be outings led by leaders in the local chapter or group, in one of the Club's 50 Inner City Outings groups, or on one of the 350 National Outings run annually (the trips advertised in *Sierra* magazine). These volunteer leaders and participants are natural allies in your campaign to protect your national forest or grassland—the experience of connecting trip participants to the natural world can be made more profound by educating and enlisting them to take an active part in the protection of the national forests. Here are some ideas about how to recruit and mobilize these Club outings leaders and participants in your forest planning effort.

1. Contact the local group or chapter outings chair to determine if there are any outings in the particular national forest. Outings chairs and leaders would look forward to discussing ways to augment their existing trip. If there are no trips to the forest, consider working with them to plan an outing that highlights the plight of the forest and how participants can get involved in the campaign. Consider a service trip do trail maintenance or restoration work to demonstrate a commitment to the forest and a community service approach. Locally-led outings are usually planned one to three months in advance and are advertised on chapter/group websites and newsletters, MeetUp, and other social media sites. You will want to be in touch with chairs and leaders as early in their planning cycle as possible. To learn more about chapter and group outings offerings and chair contact information, please visit: http://www.sierraclub.org/outings/chapter/
2. Contact the National Outings trip leader and subcommittee chairs to similarly discuss augmenting existing trips and to plan outings in the following year. National Outings are planned nine to twelve months in advance and are advertised in Sierra magazine and on the web to reach a very broad national and international audience. National Outings Subcommittee and Conservations Chairs can be found here: http://clubhouse.sierraclub.org/outings/national/contacts/
3. Contact the local Inner City Outings program near your national forest to meet with and educate the younger leadership and a dynamic participant pool to set the stage for future environmental activism. To find an ICO group, visit: http://www.sierraclub.org/ico/ If you do not have an ICO group in your area and want to reach out to youth, contact ico@sierraclub.org or local.outings@sierraclub.org for suggestions.
4. Make yourself available to discuss how to share national forest planning process information with participants on trips. Offer easy tools and steps that help you in the planning process. For example:
   a. Offer information handouts and postcards that participants can sign during the outing.
   b. Arrange to meet an outing at the trailhead or even in the field and give them a conservation talk. Most if not all outings leaders would jump at the chance to have a local forest preservation specialist speak on their trip!

c. Ask outings participants to help you map or monitor a part of the forest so they can be part of your work while they are also enjoying the outdoors.

d. Do a follow-up mailing to all outings participants who have visited your forest on a Club outing.

e. Invite participants to join in as defenders to keep the forest and grasslands wild.

5. And, if you have the time, become an outings leader! The best way to do this is to get in touch with the outings chair of the local chapter, group, or National Outings subcommittee to determine your next steps. Outings leaders must complete Outing Leadership Training 101 (OLT 101), basic first aid, and provisionally lead an outing (under the tutelage of a mentor leader). Some groups and chapters may have additional leadership requirements. To learn more, visit: http://www.sierraclub.org/outings/training/leadership/

Understanding the history and evolution of the Outings Program will help you understand the framework in which the different volunteer outings chairs operate, and therefore allow you to build a better relationship with them and provide outings that allow participants to explore, enjoy, and protect our wild spaces.

In 1901, the Sierra Club Board of Directors proposed an annual summer outing, with the purpose of encouraging members and other interested people to see firsthand the country the Club sought to preserve and protect. William Colby, who led the annual outings for 29 years, noted that "an excursion of this sort, if properly conducted, will do an infinite amount of good toward awakening the proper kind of interest in the forests and other natural features of our mountains, and will also tend to create a spirit of good fellowship among our members." This annual trip morphed into the current National Outings Program (the trips you see in the Sierra magazine) that are overseen and managed by fourteen volunteer outings chairs and their regional subcommittees. Approximately 450 volunteer outings leaders (supported by San Francisco-based staff) design, plan and lead 350 outings for around 4,000 participants. Since these outings are planned 9-12 months in advance, it is important to introduce yourself, your campaign goals, and suggestions for collaborations, etc., to the National Outings Subcommittee Chair and Subcommittee Conservation Chair as early in your campaign as possible. The outings leaders and chairs will be eager to learn more about the forest protection campaign in their trip area, and will also have suggestions for strategies for successful collaborations. Opportunities for collaboration include attending the annual subcommittee meetings to teach about the current Resilient Habitats campaign, discuss with leaders strategies to educate participants on currently-planned trips, and work with chairs to plan outings for the next year that focus on the Resilient Habitats work in that particular area. Contact information for the current National Outings Subcommittee and Conservations Chairs can be found here: http://clubhouse.sierraclub.org/outings/national/contacts/

The first local Group and Chapter Outings were run in the early 1900s in the Angeles and San Francisco Bay Chapters, whose members wanted to recreate locally and focus on local conservation issues. New local outings programs grew with the expansion of chapters and groups across the country, and local leadership is as varied and individual as the chapters and regions in which they are located. We estimate that around 5,000 volunteer outings leaders lead about 10,000 outings for roughly 200,000 participants around the country each year. These outings are usually planned one to three months in advance and are advertised on chapter/group websites and newsletters, MeetUp, and other social media sites. These local group and chapter outing programs are a great way to engage new and existing participants in the Resilient Habitats campaign, so it is very important to reach out to the local outings chair as early as possible to build a solid relationship, identify strategies for working together, and plan new outings that further the forest protection campaign. Opportunities for collaboration include working with the outings chair to become an outings leader so you can lead your own outings (http://clubhouse.sierraclub.org/outings/Common/outings-leader-handbook.pdf), discuss with leaders strategies to educate participants on currently-planned trips, and work with chairs to plan outings in the subsequent months that focus on the Resilient Habitats work in that particular area. To learn more about chapter and group outing offerings and chair contact information, please visit: http://www.sierraclub.org/outings/chapter/

Inner City Outings (ICO) is a community outreach program that provides safe and fun adventures for about 14,000 youth, disabled individuals and others who have limited access to the outdoors each year. Hundreds of volunteer leaders guide kids on hiking, camping, backpacking, and paddling outings, as well as environmental service projects, in wilderness areas near their homes. Around fifty groups in urban and rural areas around the country have been established by local ICO chairs—not every chapter or group has an ICO group. Opportunities for collaboration with ICO include the potential with

working with younger leadership and a dynamic participant pool to set the stage for future environmental activism. To find an ICO group in your area and find chair contact information, visit: http://www.sierraclub.org/ico/ If you do not have an ICO group in your area and are interested to reaching out to youth, contact ico@sierraclub.org or local.outings@sierraclub.org for suggestions.

With the goal of building a stronger and more effective Sierra Club, it is ideal to develop a relationship with the local outings leadership (National Outings and ICO if appropriate) in order to enhance and grow outings offerings and/or become a certified Sierra Club Outings leader. In cases where there is no local outings chair or leaders or outings that "need" to occur in the next month(s), you should contact the local and Inner City Outings manager to discuss the options about becoming a certified leader, working with concessionaires, or putting on large-scale "Thons" (hike-a-thon, bike-a-thon).

To find National Outings planned for your National Forest, visit: http://www.sierraclub.org/outings/national/

To find Local Outings planned for your National Forest, find the chapter or group website here: http://www.sierraclub.org/outings/chapter/

To find Inner City Outings planned for your National Forest, check to see if there is an ICO group in your area: http://www.sierraclub.org/ico/

MEDIA TIPS

MEDIA TIPS

To be successful media campaigns have to be newsworthy. But what is news? Here are some angles that make stories newsworthy. Figuring out which of these angles apply to your work can help you develop effective press outreach.

- **NEW** — Story should be current, timely, and fresh. It is a late-breaking development, something happening right now, a steaming hot entrée—not reheated leftovers. Example: The start of the forest planning process, public meetings, or the release of an environmental study by local scientists.
- **LOCAL** — It should tie into what is going on in that particular community. Example: The potential impacts on recreational opportunities of changes in forest management on a local river or recreation spot.
- **HUMAN INTEREST ANGLE** — If there is a human face and personal angle to the story, consider using it. Example: A long-time fisherman who fishes in the local river that is now threatened with pollution.
- **CONFLICT** — It's no surprise, but a story with a hard-fought conflict makes news. Describe to reporters who the good guys and bad guys are, and how the struggle is playing out. Example: Destructive energy development is threatening a local tourism-based economy.
- **CONTROVERSY** — Controversy makes news. Example: Logging practices in national forests undermining expensive fishery-recovery efforts.
- **STRANGE BEDFELLOWS** — A coalition that contradicts most reporters' assumptions of who supports environmental campaigns. Example: Environmentalists join hands with religious organizations to defend endangered species in forest plans.
- **VISUALS** — Beautiful images and sites can make news, as well as words that paint pictures. Use nature; it provides the best visuals in the world!
- **TIMELY** — News has to be relevant to what's happening now. One way to make news is to connect the campaign to a current event or holiday. Example: Use the beginning of summer or foliage season to highlight value of forests, encourage visits to the forest.

Once the news angle is determined there are a host of different tactics that can be used to get the word out. Here are just a few, along with tips on how to use them.

MEDIA EVENTS

Press conferences, rallies, and visibility events aimed at generating media coverage. Definitely let the news outlets know, in advance, of any planned media events.

PRESS RELEASES AND ADVISORIES

Send these out when creating, or responding to, news. An advisory lets reporters know in advance about a news event. A press release is a short recap of a news event, or reaction to a news event. These can be emailed to news outlets or to reporters that you know. There's a guide to producing a press release here and a sample media advisory here.

STATEMENTS

Statements are used to quickly respond to news developments, usually consisting of a longer quote from a single campaign leader, issue expert, or other qualified spokesperson. These can then be emailed to news outlets and particularly to reporters you know.

OP-EDS

"Opinion Editorials" are opinion essays, usually 500-700 words, that are published in newspapers. Call or email your newspaper to see if they will accept one from you. There's a guide to Op-Eds here.

LETTERS TO THE EDITOR

Short (no more than two paragraphs or so) opinion pieces that are submitted by readers to a newspaper in response to an article or an important issue. Stick to one subject and send the letter in promptly. There's a guide to Letters to the Editor here.

BLOG POSTS

Blogs are growing in importance as more papers shut down. They are a more visual medium—photos and videos are ripe for online coverage. Posts by influential bloggers can be invaluable in spreading information and

can also be a source of news for traditional media—blog or online coverage can lead to TV/newspaper coverage. Start reading the blogs near you or ones in communities near the forest. You'll soon see the opportunities to work with the blogger to publicize issues related to your national forest. There's a guide to using blogs here.

SOCIAL MEDIA MESSAGES

Posts on Twitter, Facebook, and other social media accounts to share action links, photos, and good articles. There's a guide to using Twitter here.

PITCHING

Generate a media story by calling reporters to let them know about the great work being done or a new angle on the forest planning process. There's a guide to pitching a story here.

MESSAGE

FOREST MESSAGE GUIDANCE

To connect with people of all stripes, be heard, and effect change, messages need to tap into existing beliefs and identify common ground. The most effective messages are those that tap into existing values—future generations, family, stewardship, fairness, responsibility, legacy. The idea of balance in how national forests are used and protected is strongly and widely held; messages related to upsetting that balance, especially in favor of big corporations, can be effective. Messages centering around scientific proof of climate disruption and management practices have little impact on those who are not already supporters.

CLIMATE

Public opinion research shows that while Americans care a great deal about clean air and water (especially as it relates to their family's health), they are not greatly concerned with climate change. Adding to the challenge is the highly politicized nature of the climate issue. Keeping that in mind, messages should lead with things that people already care about and that cross political lines—stewardship of our forests for future generations, pride in forests as pieces of American identity, the role of forests in cleaning our air and water, immediate threats that poor planning poses to well-loved places, etc. Climate disruption should be just one part of a list of problems. On the flip side, solutions for climate threats should be among a list of benefits (clean water, clean air, creating more diverse and sustainable local economies) coming from good management. Climate messages alone are not strong enough to persuade those who are not already supporters; however, combining them with land- and wildlife-oriented values-based messages can effectively move target audiences.

Messages about climate disruption need to be specific. Many people do not know what climate change impacts may look like. Use examples that are locally observable and involve locally popular plants, animals, or scenic vistas that would be affected. Paint the picture with your message by giving examples—more wildfires, more intense storms, drought, shifting migration routes and food sources. Be mindful of tone when messaging around climate changes. Overwhelming people with the enormity of the situation is not helpful. Instead seek to convey the need and the opportunity for action.

RESILIENT HABITATS

The concept of resilient habitats requires changing the frame of thought about conservation. To make the transition easier, focus on the conservation themes that are already familiar to most of the public—protecting wild spaces, connecting them so that animals have room to roam, and restoring degraded areas to health. Boiling down complex planning models to these underlying concepts allows the message to focus on values that people can connect with and understand.

Similarly, preparing for uncertain threats (i.e., buying flood insurance), or knowing that the sick and weak are most affected by change, are things people are aware of and acknowledge in their daily lives. When applied to the conversation about climate planning, such points of common understanding can garner support for actions,

MESSAGE IDEA: WHAT'S AT STAKE IN CLIMATE CHANGE?

- We have a suggestion for developing an easily understood public message concerning your national forest and the impact climate change will have upon it. Work with knowledgeable scientists and others to find an animal or well-known plant or tree that will be negatively affected by climate change.
- Then develop a simple message highlighting the possible fate of that species.
- An example: Unless we actively change the way that we manage the George Washington Forest in Virginia, coming changes to our climate might well make the native brook trout go extinct.

even among those who don't fully believe in climate disruption. The ideas of creating healthy natural systems that can survive new and growing threats, and taking steps to prepare for the storms, droughts, and wildfire brought on by a changing climate, effectively tap into existing beliefs.

For ideas about how to talk about the importance of National Forests, see here.

SCOPING

HINTS FOR PARTICIPATING IN THE FOREST PLAN SCOPING PROCESS

Submitting comments during the scoping period is essential to securing a favorable draft and final decision. Doing so also establishes legal standing.

When submitting scoping comments to the agency you must identify yourself as representing Sierra Club and providing your Chapter or Group address in your letter or e mail. Include in your comments, Sierra Club's local and national membership numbers and what interests are represented.

There is no legally required timeframe for scoping, but the Forest Service will usually indicate the date by which they would like you have your input. Always have your letter postmarked or time stamped by that deadline.

IN YOUR SCOPING COMMENTS:

Insist that the agency conduct a climate vulnerability assessment

Insist that the plan look at reducing the vulnerability to climate change by:

1. protecting adequate space including roadless areas, old growth, connectivity corridors (including new protected area recommendations)
2. reducing non-climate stressors (invasive species, dams, overgrazing, ORVs, roads, water pollution and sedimentation, fragmentation etc.)
3. apply climate smart management:
   a. Identify, monitor and protect indicator species (ideally climate sensitive species)
   b. Identify, monitor and protect threatened and endangered species
   c. Protect and restore watersheds, emphasizing a reduction of roads and open road densities, culvert upgrades and prescribed burning to restore ecosystems.
   d. Coordinate with adjacent landowners
4. maximize natural systems carbon sequestration by reducing soil disturbance, protecting old growth, reducing logging density and frequency etc.)

Insist that the agency consider an option that maximizes building ecosystem resistance and resilience through the principles stated above.

Insist coordination with other agencies, such as NPS, BLM and with private land owners if they manage land in same ecosystem.

Use the scoping period process to flesh out your priorities and to gather as much scientific information as possible from available sources and local scientists about what would be needed on your national forest or national grassland to help it survive climate change.

Reference law, regulation, policy, and/or data applicable to your management requests. Supply maps if relevant.

You do not have to do this by yourself. Consider recruiting other volunteers and scientific experts. For more information about creating a team, visit here.

For more information about working with scientists and other campaign partners, see the outreach tips.

READING

HOW TO READ A NATIONAL FOREST PLAN

Don't panic. You are faced with a phone-book-sized document. You are staring at it, and it is staring right back at you. Uh-oh. Indeed, there may be two or more volumes of it. Wow. Is this for real? To sit down and read it through might take weeks.

Cheer up. You do not have to read the entire document. But be aware you may have to spend more than one day on it. Note first of all how it is divided up—its sections. Generally, the proposed plan, which is equivalent to the "preferred alternative" of the *draft* Environmental Impact Statement (DEIS) that will accompany the plan; this is followed by descriptive information ("affected environment" and maybe also "environmental consequences"), which describes what the forest is like, what its resources are, and how the plan may affect them. Then comes the DEIS, which will describe different alternatives for managing the forest. The alternatives are the "meat" of the document. At the very minimum there will be a proposed action, and a "no action"—namely, no changes, "keep things the way they are"—alternative. Most likely there will also be at least two other alternatives, one being more protective of the environment than the "preferred alternative" and one being less protective—that is, more permissive of unregulated or minimally-regulated human activity on the forest.

At the least you will want to look at the "preferred alternative"—what they are proposing to do. That is important.

The proposal is usually divided into different resources, and you do not need to read or become familiar with each one. Some will be of more interest to you than others—wildlife, for instance; or fire management, motorized recreation, timber, or roadless management. Concentrate on three or four resources and compare how differently the Forest Service proposes to deal with them in the several different alternatives. That will give you a fair idea of the scope of the pan and the effect it could have on things you care about. Feel free to use a highlighter if you come upon sentences or paragraphs you may wish to refer to, or quote in your comments. Mark those pages with sticky tabs to minimize the time you need to spend searching for things you already found once. Or take a note pad and write down page numbers to which you can refer.

Don't be alarmed if you don't think you can support any of the alternatives. Some past forest plans have been so unimpressive that we have joined coalitions of local concerned citizens to prepare a "conservationist alternative." Such an alternative may take bits and pieces from various published alternatives, but in the worst case, the wheel may need to be fully reinvented. That is another chapter in forest activism. Do not worry about that for your comments, but you can state that none of the alternatives adequately protects the resources that you care about, and the agency should go back to the drawing board and come up with a real, genuine, conservation alternative.

COMMENT PERIOD

HOW TO BE MOST EFFECTIVE DURING THE PUBLIC COMMENT PERIOD

Review document to see if it addresses the issues you raised in scoping process.

Consider requesting an extension to the established comment period.

If there is an alternative that maximizes building resilient habitats as outlined above, develop a campaign to build broad public support behind it.

If there is no such alternative, build broad public support for such an alternative anyway, either by urging that the best alternative in the draft be revised/improved to incorporate your resiliency goals, or by rallying support for a "citizens alternative" that incorporates your resiliency goals.

For more information about campaign planning, visit power mapping and campaign recipes.

Work with Sierra Club staff, scientists, and other coalition partners to write detailed comments.

A NEPA or EIS decision is not determined by popular vote but by substantive comments backed by law, regulation, policy, and/or data.

Strategic grassroots and grasstops pressure is still critical in order to pursuade, or give cover for, a favorable draft and to elevate your overall conservation message.

Identify a clear decision-maker (target), and interest groups and individuals who can influence the target.

Consider both grassroots and grasstops campaigns to pressure your target.

Work with Sierra Club staff or campaign partners to generate comments through action alerts. Consider the following:

- Mail an alert to members & supporters
- E-mail/Convio to members & supporters
- Submit an alert to newsletters & web-sites
- Use social media such as facebook
- Earned and paid media
- Organize public education/visibility events
- Encourage partners & allies to do the same

Be aware that some agencies consider mass-printed postcards as a petition or as one comment. While not always feasible, personal written comment is optimal.

If there are any public hearings, recruit grasstop and grassroot supporters to attend and submit testimony. Provide talking points.

Identify media opportunities throughout the NEPA/EIS process.

After the public comment period is closed and comments have been processed by the agency, look for a Summary of Public Comment or Content Analysis document.

Consider submitting a Freedom of Information Act request to gain access to the public comments.

Conduct an analysis of public comment.

Data obtained from the analysis could inform future messaging and tactics.

RECORD OF DECISION (ROD)

WHAT TO DO ONCE THE FINAL DECISION IS RELEASED

Review the final record of decision (ROD) and determine if you won.

If you did, send out a positive press release, alert your supporters, and celebrate.

If you didn't win and the decision is woefully inadequate, here are next steps:

Using Forest Service scorecard, grade the final EIS as a D or an F for failure to address climate change. You can get a copy of the Scorecard here.

Media: Call reporters and issue a press release criticizing the plan. Include as many allies and scientists as possible.

Prepare an administrative appeal of the decision For more information on appealing your final decision look here.

Last step: if appeal fails, consider litigation. Contact the Sierra Club's Environmental Law Program to understand your legal options.

APPEALS

AN ACTIVIST'S GUIDE TO APPEALING A FOREST PLAN UNDER THE NEW FOREST PLANNING RULE, 36 CFR 219

The U.S. Forest Service recently adopted a new planning rule, which sets out the administrative procedures under which National Forest System land management plans (often called "forest plans") are developed, revised, and amended. The Forest Service published the new planning rule in the Federal Register on April 9, 2012 and began implementing the new rule on May 9, 2012. These procedures are codified at 36 Code of Federal Register Part 219.

OVERVIEW OF NEW COMMENT AND APPEAL PROCEDURES

The new planning rule makes significant changes to the time frame for public comments on draft NEPA documents and puts in place a pre-decisional review phase that the public must go through in order to appeal final Forest Service decisions.

Under the new rule, the public comment period on a draft EIS must be at least 90 days. The public comment period on a draft EA or draft CE must be at least 30 days.

Once the Forest Service issues a final decision on a new forest plan, plan revision, or plan amendment, anyone wanting to object to the final decision must file for pre-decisional review with the Forest Service.

If the Forest Service prepared an EIS, the public must file for pre-decisional review within 60 days of the final decision. If the Forest Service prepared an EA or CE, the time period to file is within 45 days.

PUBLIC NOTICE

The new planning rule requires formal public notice at each of the following steps in the planning process (36 CFR 219.16 (a)(1)-(6)):

- When an assessment begins;
- Development begins of the proposed plan, plan amendment, or plan revision;
- The proposed plan, plan revision, or plan amendment and the associated environmental review documents (such as an EA or EIS) are made available for public comment;
- The start of the 30-day objection period;
- The plan, plan amendment, or plan revision is approved;
- To announce how a planning process initiated under an earlier rule will be conformed to the new rule.

COMMENTS ON A DRAFT EA OR DRAFT EIS

As described in detail below, the proposed rule essentially requires citizen groups to include in their comments to a draft EA or draft EIS every issue that the group may want to object to later on in the review process. Given that the time period for comments is likely to be either 30 days (for an EA or CE) or 90 days (new plan, plan revision, or plan amendment that requires an EIS), the onus is on the public to identify and address potential issues at a very early stage.

Under the new rule, for example, when a Sierra Club chapter submits comments on a draft EIS for a forest plan revision, any objection it files later challenging the plan will be limited to issues raised in the chapter's prior comments on the draft EIS.

COMMENT TIME PERIODS

The new planning rule sets two different time periods for comments on a proposed plan, plan amendment, or plan revision based on the type of NEPA review that accompanies the decision.

- When an environmental impact statement **(EIS) is prepared** for the plan, plan revision or plan amendment, the comment period must be at least 90 days. 36 CFR 219.16(a)(2);
- When an **EIS is not prepared** for a plan amendment, the comment period must be at least **30 days**. 36 CFR 219.16(a)(2);
- A new forest plan or forest plan revision will always require the preparation of an EIS. 36 CFR 219.7(c);

- A forest plan amendment may be approved using an EIS, an environmental assessment (EA), or a categorical exclusion (CE), depending on the scope and scale of the amendment and its likely effects. 36 CFR 219.13(b)(3).

PRE-DECISIONAL ADMINISTRATIVE REVIEW

The new planning creates a pre-decisional administrative review process as the only method for individuals and groups to file administrative challenges to a forest plan, plan amendment, or plan revision.

The rules for who may file an objection, the requirements of the objection itself, and the procedures that control how the Forest Service reviews and rules on the objection are found at 36 CFR 219.50 et seq. The major points are set out below:

- **36 CFR 219.52**
  Public notice for the objection period
  - The rule sets out specific requirements (36 CFR 219.52(c)(1)-(7)) for the content of the public notice that initiates the objection period. The notice must include, for instance, the name of the plan, instructions for how and when to file an objection, and a statement describing the minimum content requirements of an objection.
- **36 CFR 219.53**
  Who may file an objection
  - The rule sets two major limits on who can file an objection.
  - First, only individuals or organizations that filed comments during the formal comment period may file objections. 36 CFR 219.53(a).
  - Second, objections must be based on previously submitted substantive formal comments unless the objection addresses an issue that arose after the comment period. 36 CFR 219.53(a).
- **36 CFR 219.54**
  Filing an objection
  - The rule clearly defines how to file, what may not be incorporated by reference, and what information must be in an objection. Specific subsections are set out below:
    a. All objections must be in writing.
    b. Objections may not incorporate other documents by reference, except for federal laws or regulations ((b)(1)), Forest Service planning documents ((b)(2)), documents referenced by the Forest Service in its planning documentation related to the plan ((b)(3)), and formal comments submitted to the Forest Service by the objector earlier in the comment period ((b)(4)).
    c. At a minimum, **the objection must include the following:**
       1. Objector's name, address, phone number, and email address;
       2. Signature or verification of authorship of the objector;
       3. The name of the lead objector if multiple names are listed;
       4. The name of the plan, plan amendment, or plan revision being objected to, and the name and title of the responsible official;
       5. A statement of the issues and parts of the plan, plan amendment, or plan revision to which the objection applies;
       6. A concise statement explaining the objection, how the plan is inconsistent with the law, and how the decision may be improved;
       7. A statement that **demonstrates the link between prior formal comments submitted by the objector and the content of the objection,** unless the objection concerns an issue that arose after the opportunity for public comment.
- **36 CFR 219.56**
  Objection time periods and processes
  - The rule sets firm time frames for objections that begin on the publication date of the public notice for the objection period. 36 CFR 219.56(a).
  - EIS: objections must be filed within 60 days. 36 CFR 219.56(a).
  - EA or CE: objections must be filed within 45 days. 36 CFR 219.56(a).
  - **No extensions are allowed.** 36 CFR 219.56(d).
  - The reviewing office must issue a written response to all objections within 90 days of the close of the objection-filing period. The reviewing officer does have discretion to extend this response time. 36 CFR 219.56(g).

- **36 CFR 219.57**
  Resolution of objections
- Prior to the issuance of the reviewing officer's response, either the officer or the objector may request a meeting to discuss the objection and potential resolution.
- Other interested parties must be allowed to participate in these meetings, which are open to the public.
- The reviewing officer's response will be the final decision of the agency. 36 CFR 219.57(b)(3).
- The Forest Service may not issue a decision document concerning a plan, plan amendment, or plan revision until the reviewing officer has responded in writing to all objections. 36 CFR 219.58(a).

CLIMATE SMART

DEFINING "CLIMATE SMART" MANAGEMENT

Rapid changes in the earth's climate are well underway, with more to come. In response, our world's ecosystems are changing, in a variety of sometimes sudden and alarming ways. Even if we dramatically slash greenhouse gas emissions immediately and avoid the worst effects of climate change, the natural world will still be buffeted by temperature increases, altered precipitation patterns, more extreme storms, and other unavoidable effects. These climactic and ecological changes are now fundamental drivers to be considered in all land management and planning activities. By acting now to improve the resilience of our nation's habitats to climate change, we can help wildlife and ecosystems adapt and avert the projected extinction crisis while protecting our own lives and well-being.

The science on building resilient habitats that can better adapt and remain healthy in the face of climate change is surprisingly clear. We know that to build habitat resilience, we must protect large, wild spaces, such as parks, refuges, and wilderness areas, and connect them via wildlife corridors. In addition, we need to restore and protect natural areas that are not in a wilderness state to provide buffer areas and round out this climate refuge network. We also must reduce non-climate stressors, such as habitat loss, invasive species, and pollution, and apply active (sometime experimental) management approaches that incorporate—and are modified or discarded based upon—the latest scientific findings. In turn, if we protect, restore, and properly manage our nation's forests, prairies, and wetlands, we can vastly increase the amount of CO^2 that is bound up (sequestered) in plants and soils, reduce atmospheric CO^2 to safer levels, and thereby help mitigate (limit) climate change.

We use the term "climate smart" management to encompass this full suite of land and water conservation strategies and management approaches needed to promote both adaptation and mitigation (limiting the negative effects of climate change on species and ecosystems and limiting climate change itself).

The national forest planning process offers Sierra Club activists and our allies an excellent opportunity to push for climate smart management on the 193 million acres comprising our nation's national forests and grasslands in 43 states and Puerto Rico. The following pages describe in more detail the Sierra Club's approach to sound, science-based management that addresses both the realities and uncertainties of climate change and protects the ecological integrity and biodiversity of our nation's forests.

1. PLAN FOR CLIMATE CHANGE AND USE BEST SCIENTIFIC INFORMATION

National forest and other land managers must now conduct all planning with an eye to the reality that our climate is rapidly changing, whether the context is the revision of a national forest plan or the development of timber sales, watershed restoration, or other ground disturbing projects. Every land management decision now comes with both the opportunity and responsibility to help safeguard ecosystem values in the face of climate change. Planning must also address the reality that climate change is having an effect across landscapes and land ownerships, so managers must consider larger ecosystem issues and coordinate across boundaries with other agencies, private landowners, and large landscape conservation and planning initiatives.

Crafting and implementing effective conservation strategies for our national forests in a climate-changing world requires an understanding of the potential impacts of climate change on wildland species and resources. That is why the drafting of an environmental impact statement for all forest plans should begin with the completion of a climate vulnerability assessment.[1]

Climate vulnerability assessments help identify which species, habitats, and/or ecosystems are likely to be most affected by climate change, as well as why these resources are likely to be vulnerable. In addition to other factors, vulnerability assessments should consider the interaction between existing stressors (water pollu-

tion, invasive species, logging, and other management practices, etc.) and the impacts of climate shifts on forest resources. Determining which resources are most vulnerable can help the conservation community and the agency identify important land management priorities (focal species, ecological processes, or other key resources) and develop conservation responses that are better designed to achieve species persistence.

It is important for the Forest Service to engage the conservation community and other key stakeholders during the development of each Climate Vulnerability Assessment. Sierra Club Chapters and their allies can play a key role as stakeholders in shaping the focus of these assessments as well as their implementation. Read more here.

In addition to pushing for and engaging the agency during the Vulnerability Assessment, activists should look for ongoing opportunities to engage the scientific community in the planning (and management) process. The Forest Service, like other agencies, sometimes overlooks (intentionally or not) key research and researchers (including noted academics at institutions nearby or within the region) whose work could help inform the development of a strong scientifically grounded and protective forest plan. Sierra Club activists and allies should build upon their own existing networks of scientists and technical allies and seek out additional forest, wildlife, and ecological experts who can engage at various stages throughout the planning process. This engagement can help insure that the forest plan is grounded in the best possible science and appropriately addresses both areas of general scientific agreement as well as areas of significant uncertainty.

The impacts of climate change are occurring across boundaries, borders and landscapes, so the Forest Service must engage with an array of agencies, landowners and organizations during forest planning. In many cases, the work of the relevant Landscape Conservation Cooperative will be critically relevant to the national forest. The Landscape Conservation Cooperatives (LCCs) were established by Secretary Salazar via a Secretarial Order in 2010[2] and are a network of public-private partnerships that are intended to "provide shared science to ensure the sustainability of America's land, water, wildlife and cultural resources."[3] As a collaborative, LCCs seek to "identify best practices, connect efforts, identify gaps, and avoid duplication through improved conservation planning and design."

There are 21 LCCs, which collectively form a national network of land, water, wildlife, and cultural resource managers, scientists, and interested public and private organizations—within the U.S. and across our international borders—that share a common need for scientific information and interest in conservation. In some of these LCCs conservation groups, such as the National Wildlife Federation and Defenders of Wildlife, have staff who have engaged and are playing key roles. Sierra Club activists and their allies should find ways to track the efforts of the one or more LCCs that cover their region of the country, even before the forest planning process begins. One possible avenue for doing this is by developing direct relationships with scientists or agency personnel engaged in the LCCs in your area.

Finally, for now, we'll note that the Forest Service's has appointed one hundred and twenty part-time Climate Change Coordinators on forests across the country to serve as local leads for implementing the agency's response to climate change. As envisioned in the Forest Service's Climate Change Roadmap,[4] the coordinators should play an important internal role within each forest as well as an external role, facilitating education and dialogues in the community. If possible, develop a relationship with your forest's coordinator —even before your national forest announces it is revising its forest plan. A good early step could be to invite the Climate Change Coordinator from your local forest to give a presentation on Forest Service climate adaptation/mitigation activities to your Sierra Club Chapter or Group. For more ideas about working with your forest's Climate Change Coordinator, please see this.

2. PROTECT AND CONNECT WILDLANDS AND HABITATS

We know that to build habitat resilience, we must protect large, wild spaces, such as unroaded national forest roadless areas and Wilderness Areas and connect them via wildlife corridors and other conserved habitats. One of the key challenges posed by landscape changes that will come with climate change is that the areas that have currently been set aside for conservation and critical wildlife habitats will not necessarily be sufficient in the future. As a result, it is incumbent on the Forest Service and other land managers to protect not only the lands and corridors that wildlife need today, but also those habitats that will be critical going forward.

The forest plan must include specific management direction that will provide adequate protected and well managed habitats for species to adapt and move with the least possibly restrictions in response to their changing environment. To accomplish this, national forests should be managed to the maximum extent possible to

protect lands that are currently in an unroaded condition, remove unnecessary and damaging forest roads and restore degraded habitats. On those lands where development (such as road building and timber cutting) has occurred, management direction should recognize and accommodate the need to maintain—or restore—biodiversity and critical ecosystem processes (hydrological, carbon storage, etc.).

During the planning process, activists should prioritize maximizing the accurate inventory of unroaded lands recognized by the Forest Service. The agency has referred to these as "roadless" lands. Agency inventories are often incomplete due to limitations of the administrative definitions for what constitutes unroaded characteristics, limited agency attention to detail, and, too often, due to longstanding agency biases against the identification and protection of Wilderness quality lands.

Here are a number of critical points to remember and/or emphasize during all stages of the planning process:

CORE AREAS (High quality lands, including unroaded areas, where the best habitats are generally found)

- Work to identify (through citizen mapping and other efforts) all unroaded national forest lands —in addition to those already protected by the 2001 Roadless Rule—that should be recognized by the agency and maintained in an unroaded condition. Ensure the forest plan's standards and guidelines provide the greatest protection possible for these areas to insure their unroaded character is maintained into the future.
- Maximize the size of any agency recommendation to Congress for Wilderness. The forest will select lands from its "roadless" inventory as the basis this recommendation. As many Sierra Club activists already know, the agency has historically found a great variety of questionable reasons to justify not recommending high quality wildlands for Wilderness designation by Congress. It is generally much more difficult to win congressional designation of an area that the Forest Service does not recommend for Wilderness protection.
- Maintain strong protections for Wilderness Study Areas, Wild & Scenic Rivers, National Recreation Areas, Research Natural Areas, and other unroaded or minimally roaded lands. Ensure management direction for existing statutorily protected areas (such as Wilderness and Wild & Scenic Rivers) follows the law. Ensure the agency does not eliminate existing administrative protections (against logging or road construction, for example) from the previous forest plan for important habitats.
- Think beyond the national forest boundary. In many cases, important unroaded areas on national forest lands will be part of ecosystems or habitats that also cross over into lands managed by other agencies or owners. The Forest Service must work to coordinate across ownerships to ensure strong coordinated protection of core habitats and unroaded lands.

CORRIDOR AREAS (Linkages between core areas)

- Press the Forest Service to maintain wildland connections (wildlife corridors) between areas of core habitats for key species, especially for those found to be at risk from the impacts of climate change. Such species might be identified during the Vulnerability Assessment, mentioned above, that the agency should conduct at the start of the planning process or by other means.
- Ensure that the new plan recognizes important landscape linkages identified by state wildlife agencies and non-governmental conservation organizations. The standards and guidelines for these areas must protect the integrity of these important wildlife corridors (habitats).

BUFFER AREAS & OTHER IMPORTANT LANDS AND HABITATS (Lands contiguous to core/corridor areas and other habitat identified as critical to selected species)

- Identify critical lands adjacent to core and corridor areas. Ensure that a level of protection is conferred to these buffer areas that will allow the core/corridor areas to be functional.
- Ensure calving, lambing, winter range and other important habitat areas identified by state conservation agencies or other means are covered with specific direction in the standards and guidelines.
- Protect riparian areas and other critical habitats for fish and aquatic life. Cold water fisheries will be particularly sensitive to warming temperatures, for example, and should be safeguarded to the fullest extent possible by the plan's standards and guidelines.
- Ensure that management of habitats occupied by rare, sensitive or otherwise significant species (including threatened and endangered species) is consistent with the law and the needs of these species.
- Ensure the plan recognizes wetlands identified in the National Wetlands Inventory[5]

COORDINATION ACROSS BOUNDARIES WITH OTHER LARGE LANDSCAPE CONSERVATION PLANS AND INITIATIVES

- As noted above, the reality of our changing climate makes it even more critical that national forests be managed to reflect their contributions to (and impacts on) the larger landscapes and ecosystems in which they are found.
- The forest plan should coordinate with goals established in other large landscape conservation plans including but not limited to:
  - State climate adaptation plans
  - State Wildlife Action Plans[6]
  - Partners in Flight Bird Conservation Plans[7]
  - The National Fish Habitat Action Plan and related partnership plans[8]
  - North American Waterfowl management Plan and related joint venture plans[9]
  - The National Invasive Species Management Plan[10]
  - The North American Grouse Management Plan[11]
  - Management plans of directly adjacent conservation areas

3. PROMOTE THE ABILITY OF FORESTS AND SOILS TO STORE CARBON

The oceans are already supersaturated from absorbing excess CO^2. If we protect, restore, and properly manage our nation's forests, prairies, and wetlands, we can increase the amount of CO^2 that is locked up in plants and soils and thereby reduce atmospheric CO^2 to safer levels. In the process, we will also create more resilient habitats on these lands and waters by improving management practices.

Forest plans should recognize and promote the forest's key value for carbon sequestration (the uptake of atmospheric carbon by forests and the storage of carbon in soils, vegetation, and trees).

Activists will likely find they need to push the Forest Service to acknowledge the critical carbon stored in old growth and mature forests, as well as the carbon storage benefits of healthy, undisturbed forest soils.

As part of the analysis for the draft environmental impact plan the agency should assess: 1) existing and potential carbon storage (in soils as well as in old growth and other standing trees) and the effects of management for carbon on other resource values; and 2) how changes in fire regimes, as well as insect and disease outbreaks under different climate scenarios are likely to affect the forest's ability to store carbon.

4. RESTORE DEGRADED HABITATS

Past management practices and other factors have degraded millions of acres and thousands of stream and river miles in our nation's national forests. Tree plantations; overgrazed range and grasslands; degraded streams, wetlands and watersheds; aging and unnecessary small dams; poorly routed and/or maintained trails, and failing road systems all reduce the integrity and biodiversity of our terrestrial and aquatic forest ecosystems and offer opportunities for restoration.

Sierra Club activists can use the forest planning process as an opportunity to identify and prioritize appropriate restoration activities. When properly planned and implemented, restoration projects can restore native species, improve habitat conditions, improve ecosystem functions and carbon sequestration, support recreational opportunities, and create jobs in local communities. Depending on the national forest and region in question, projects can include a wide variety of activities, including but by no means limited to: re-establishing riparian vegetation and habitats, restoring wetlands, decommissioning roads and trails and improving drainage on road and trail networks, removing ecologically invasive species (including aquatic invasives), and small dam removal.

5. REDUCE MANAGEMENT ACTIVITIES AND OTHER FACTORS THAT PUT ADDITIONAL STRESS ON FISH, WATER, WILDLIFE AND WILDANDS

As climate change threatens the health of our forests, "traditional" threats, including road construction, drilling, mining, grazing, ORVs, and commercial logging (to name but a few) are taking on even greater significance. These longstanding issues must now be recognized as "non-climate stressors" that fragment habitats and add injury to our nation's wildlands on top of the insult of warming temperatures, drought, etc. These stressors can multiply the damaging impacts on an ecosystem when combined with climate change. Such a synergy of impacts can significantly increase the risk of species extinction as well as the loss of a wide array of ecosystem benefits.

For example, logging, expansive road networks, mining, mineral exploration, and livestock grazing can all pollute streams, degrade aquatic habitats, and promote the spread of invasive species that exacerbate the effects of climate change on trout and other fisheries. Such a synergy of impacts can significantly increase the risk of

species extinction as well as the loss of a wide array of ecosystem benefits. Activists must push Forest Service forest management plans towards eliminating or mitigating these impacts so that our wildlands and natural areas are better able to absorb the effects of climate change. We must block these non-climate stressors in order to give our forests and wildlife a fighting chance.

In general, based on the needs of focal species and resources as identified in the Climate Vulnerability Assessment and other sources, forest plans must address the impacts of timber, mining, grazing, road and off-road vehicle use on landscape connectivity, wildlife habitat and corridors, watersheds, ecosystem services (water flows and carbon sequestration, for example), and overall ecosystem health. Where habitats have been previously degraded and fragmented—whether by roads, logging operations, or other means—the new forest plan should define steps to reduce this fragmentation and restore degraded lands (see #4 Restore degraded habitats, above).

Specifically, the management direction that you strive for might include the following stressors:

- **Timber cut levels.** Work to (1) reduce the volume of the cut, (2) limit the extent of the forest area that is subjected to scheduled cutting (tentatively suitable and/or suitable forest land), and (3) prevent logging of old growth (high carbon forests) and other ecologically important stands, and of those forests that may not regenerate due to escalating temperatures and drought (such as south-facing slopes in some areas).
- **Mining and mineral development.** Reduce the area of the forest that is open to mineral entry.
- **Grazing**. The agency's grazing decisions should be based on ecological indicators that include climate change factors and only allow grazing where ecological health is not compromised. Activists should strive to (1) reduce the impact of grazing on lands, waters, and species that are vulnerable to climate change, (2) ensure that any grazing use be in deference to wildlife habitat needs and ecosystem recovery needs, (3) reduce, as necessary to protect ecological integrity, the number of grazing allotments on the forest along with their attendant grazing outputs as measured by animal unit months, and (4) ensure that the forest or grassland plan contains requirements that grazed areas will be adequately monitored and resource damage will be addressed.
- **ORV Abuse.** Strive to reduce the number of routes on the forest that are open to ORV use (such as trail and/or road miles). This applies to both summer and winter uses. Pay particular attention to the impact of ORVs on the habitats of vulnerable species such as aquatic species or wildlife that need unfragmented habitats or are sensitive to human presence and disturbance.
- **Downsizing the road system.** The network of roads on our national forests exceeds actual transportation needs and agency road-management budgets, and causes sedimentation and other damaging impacts to forest lands and waters. Work with the Forest Service to reduce the size of the road system when overbuilt by (1) permanently eliminating (decommissioning) roads, (2) reducing open road densities, (3) reducing road standards where applicable, and (4) increasing the number of seasonal road closures.
- **Fragmentation of habitat.** Press the agency to recognize where habitat is heavily fragmented. Ensure the new forest plan recommends methods and steps to reduce this fragmentation such as closing roads. Land ownership patterns where intermingled ownerships are managed for resource extractive purposes can fragment habitat. Advocate for improved cooperative management approaches and/or blocking (or consolidating) land into patterns of solid public ownership.
- **Invasive species.** Determine the agency's plan to eliminate invasive species. Work to improve the plan and support their efforts to eliminate invasive species from the forest. Reducing the size of the road network will help here, too.
- **Toxics**. Determine the agency's plan to eliminate toxics from forest management. Pesticides, for example, can make cold water fish such as cutthroat trout more sensitive to warming waters. Advocate for the removal of contamination wherever it is found on the forest. Mine sites, including abandoned sites, are often culprits.

6. ACTIVE MANAGEMENT, INCLUDING NEW AND/OR CURRENTLY LESS COMMON APPROACHES MAY BE NEEDED, BUT SHOULD BE TESTED WITH MONITORING OUTSIDE OF CORE PROTECTED WILDLANDS

One of the most challenging aspects of climate change is the reality that past approaches to wildlife conservation and wildland protection previously advocated by

the Sierra Club and other groups (and described in #1-5 above) may not be sufficient to protect species and wildands in the face of the rapid and unprecedented shifts in climate conditions our nation—and the world—are experiencing. The harsh reality is that humans have unleashed a cascade of ecosystem changes that we have limited ability, knowledge, and understanding to address.

New and even experimental approaches may be warranted on our national forests in some situations to save key species and habitats and also to determine which management approaches may actually be most effective in the face of climate-disruption-driven threats to our wildlife and wildlands. That said, we are not advocating that the agency be given carte blanche leeway on our forests. Sierra Club activists and their allies should advocate for the implementation of only those approaches that have a basis in independent peer-reviewed science. Further, we must press to see that the least-tested and most experimental approaches are not tried in large-scale, sweeping ways until they can be assessed by the results of monitoring (see below).

It is not possible to give detailed place- or species-specific advice in this document. In general, however, as activists engage in deliberations with the Forest Service and other agencies about whether, where, and when to undertake such "novel" or experimental approaches, we encourage you to keep the following guidelines in mind:

a. Wilderness areas and other less-disturbed lands are generally not appropriate for active management and/or experimental approaches. These areas constitute the scientific "controls" by which we can help judge the efficacy of new or more active management approaches. They are not the first place we should go for experimental management.

b. New approaches should have a basis in peer-reviewed science and should be carefully monitored to ascertain if they actually produce the intended wildland and/or species benefits. The Forest Service and other federal agencies have a poor track record when it comes to monitoring the impact of their management activities. Shrinking agency budgets are not likely to improve this situation. Nevertheless, we must be vigilant in ensuring that new active-management approaches are not tried in sweeping, large-scale ways until they can be assessed by the results of monitoring.

c. Where previous agency planning efforts have produced ecosystem based conservation plans—such as the Northwest Forest Plan for the ancient forest habitats of Oregon, Washington, and northern California—the management restrictions and protected habitats of these plans must not be abandoned. As with wilderness areas, novel management approaches should be tested and monitored outside long-considered, ecosystem-science-based, and hard-won protection areas for key habitats and species.

The following are examples of active management approaches that may be warranted in some areas and under certain conditions—with careful results-based monitoring—on our national forests. Determining which of these approaches, if any, will be warranted in a given situation will require careful attention to the best available science.

- Restoring disturbed areas with vegetation better suited to emerging climatic conditions
- Building redundancy into landscapes by creating new populations of important species through the translocation of individuals into new areas
- Translocating (moving to a new location) individual animals, and where feasible, entire populations, to areas of more suitable habitat when existing landscape barriers (highways, cities, and other features) do not allow for unassisted dispersal
- Improving habitat conditions in areas affected by elements of climate change so that individuals and populations of a species can disperse without additional assistance (e.g., providing water sources in appropriate areas)
- Removing populations from the wild for the purpose of ex-situ conservation and possible introduction into new habitat at a later date
- Thinning forests and improving vegetation conditions to decrease the possibility of catastrophic wildfire, particularly where it could have an impact on human safety
- Actively maintaining existing habitat conditions to preserve conservation options until such time as a long-term solution is identified

7. USING NATURAL SYSTEMS TO SAFEGUARD COMMUNITIES FROM CLIMATE CHANGE

Whenever possible, we must push all agencies and land managers to use natural systems to safeguard communities from climate change. The temptation of too many community disaster planners, for example, is to deploy expensive structural engineering solutions to address climate change threats. Sea walls, levees, larger storm

sewer systems, engineered streambank stabilization and channelized rivers, trans-basin water diversions and the like are too frequently viewed as the best way to protect communities from climate change. While it is not yet clear how this issue might play out on our national forests, activists can expect to face increasing discussions of 1) how forest management affects stream flows and drinking water supplies for local communities, 2) when it is best to upgrade culverts and existing roads and when it is best to remove them entirely, 3) what logging is appropriate to reduce fire threats to local communities, and 4) how national forest watershed and streambank management affects downstream flooding, to name a few examples.

1 See http://www.nwf.org/News-and-Magazines/Media-Center/Reports/Archive/2011/Scanning-the-Horizon.aspx

2 See http://elips.doi.gov/app_so/act_getfiles.cfm?order_number=3289A1

3 See http://www.doi.gov/lcc/index.cfm

4 See http://www.fs.fed.us/climatechange/pdf/performance_scorecard_final.pdf

5 See http://www.fws.gov/wetlands/

6 See http://www.wildlifeactionplans.org/about/action_plans_text.html for a complete list

7 See http://www.pwrc.usgs.gov/pif/pifbcps.htm for a complete list

8 See http://fishhabitat.org/ for a complete list

9 See http://www.fws.gov/birdhabitat/nawmp/Planstrategy.shtm

10 See http://www.invasivespeciesinfo.gov/council/nmp.shtml

11 See http://www.grousepartners.org/pdfs/Plandraft.pdf

RESOURCES

FOREST PLANNING RESOURCES

Agriculture Secretary Vilsack presents National Vision for America's Forests:
http://www.usda.gov/wps/portal/usda/usdahome?contentidonly=true&contentid=2009/08/0382.xml

U.S. Department of Interior (USDA) Forest Service, National Roadmap for Responding to Climate Change:
http://www.fs.fed.us/climatechange/pdf/roadmap.pdf

USDA Forest Service climate change scorecard (you can use to review forest plans):
http://www.fs.fed.us/climatechange/pdf/performance_scorecard_final.pdf

Forest Service Global Change Research Strategy for 2009–19:
http://www.fs.fed.us/climatechange/documents/global-change-strategy.pdf

USDA Forest Service Climate Change Resource Center (CCRC):
http://www.fs.fed.us/ccrc/

USDA Forest Service Watershed Condition Framework:
http://www.fs.fed.us/publications/watershed/Watershed_Condition_Framework.pdf

The Forest Service's 2007 environmental footprint:
http://www.fs.fed.us/sustainableoperations/documents/fy2007-environmental-footprint.pdf

National Wildlife Federation, Scanning the Conservation Horizon: A Guide to Climate Change Vulnerability Assessment:
http://www.nwf.org/Global-Warming/Climate-Smart-Conservation/Assessing-Vulnerability.aspx

Defenders of Wildlife, Implications of Climate Change for Conservation, Restoration and Management of National Forest Lands:
http://www.defenders.org/programs_and_policy/habitat_conservation/habitat_conservation_basics/forest-lands/climate_change_and_national_forests.php

SUCCESS STORIES

FOREST CAMPAIGN SUCCESS STORIES

Collaboration, partnerships, and advocacy working together to improve our forests

GALLATIN NATIONAL FOREST

The Sierra Club is working closely with the Gallatin National Forest in Montana to coordinate a series of service trips designed to build relations with the Forest Service, engage people directly in the problems related to climate change in that forest, and provide an opportunity to get to know them.

Whitebark pine in the Gallatin National Forest are currently afflicted with white pine blister rust and an infestation of mountain pine beetles. In the fall, the plan is to find and collect seeds from the remaining trees to store and then plant them in the spring, relocate them back into the forest. In the spring, pheromone packets will be put on existing trees to repel beetles. The Sierra Club will partner with the Forest Service in both of these efforts to protect the trees, which are a critical food source for grizzlies.

In western Montana, Sierra Club staff and volunteers have had great success working collaboratively with the USFS on specific hands-on projects to help enhance fish and wildlife habitat and improve natural conditions in special places, while simultaneously organizing their community to push the agencies to adopt better policies for the entire forest system and its denizens.

In the past two years, they have worked with diverse partners such as, Trout Unlimited, The Nature Conservancy, US Forest Service, the state fish and wildlife agency, local contractors, and others to accomplish these projects and policies.

Recently-completed work includes watershed restoration projects to improve riparian and upland habitat for native coldwater fish and migratory bull trout in the Fish Creek and Ninemile drainages near Missoula. Each included a service project to plant native vegetation for streamside stabilization, helping to restore a region degraded by years of abusive natural resource extraction.

The Sierra Club also worked directly with USFS staff and partners including the Society of American Foresters to reduce fuel loads and thus the potential fire danger for communities located along the edge of the Lolo National Forest.

Meanwhile, while building up trust with the agency and partner groups, the Sierra Club also organized our members and worked closely with angler groups, sporting goods stores, affected forest communities, and other key partners to create a much-improved critical habitat plan for Bull Trout—a threatened species—and a habitat plan that took the impacts of climate change into consideration. Creative tactics that included ID cards placed throughout the state by anglers, public turnout at U.S. Fish and Wildlife Service hearings, a white paper, email alerts, earned media, social media, phone banks, pursuasive EIS (environmental impact statement) comments, and one-on-one meetings with decision-makers—all tactics you'll learn much more about in this handbook.

Bob Clark, the Sierra Club's organizing representative in Missoula, said, "This success is the culmination of learning the agency process, then building partnerships, building trust, and building a campaign to win on our issues." Working together with diverse partners and the involved agencies, these Sierra Club volunteers and staff vastly improved conditions in their local forest and, effectively, nationwide. Their work is a good model to take into consideration as you dive into the details of the handbook to protect your own local forest from climate change impacts.

SAN GABRIEL MOUNTAINS

In Los Angeles, Sierra Club staffer and long-time Catholic youth-group leader Juana Torres is working with the Los Angeles Catholic Archdiocese, and in the past has worked with Progressive Christians Uniting, to bring in new voices, perspectives, and ideas about how to care for the San Gabriel Mountains.

One of the wonderful concepts developed early on in the San Gabriel Mountains Campaign was the creation of a program that would introduce people of faith to

the mountains through presentations, meditative walks and hikes, and service projects, in an effort to show the spiritual and intrinsic values of forests and how they can help people of faith enrich their spiritual journeys.

As a direct result of the partnerships that were developed with the faith community in Los Angeles, in 2009 several faith and church leaders publicly advocated for the protection of 40,000 acres of wilderness areas. The Archdiocese of Los Angeles also started a Faith and Ecology program to reach thousands of young Catholic Latinos in Los Angeles, Ventura, and Santa Barbara counties, and teach them about the need to protect public lands and get involved in other environmental issues. Juana Torres teaches the classes and authors a monthly environmental column for the Archdiocese's youth newsletter, giving her the opportunity to speak and write on forests issues from the perspective of a Catholic and a Sierra Club staffer.

Forest protection in the Los Angeles area is being done with the help of communities of color, who comprise a large percentage of the visitors to the Angeles and San Bernardino National Forests. The Sierra Club realized that the best way to protect the mountains and forests was by working in coalition with community groups who also care about the environment, if sometimes for differenct reasons then traditional environmentalists. As such, Club staff identified and invited new community partners to join the effort of protecting the San Gabriel Mountains. These new campaign partners represent people with diverse interests and backgrounds, including non-English speaking communities and lower-income workers.

Some of the new coalition partners include COFEM (Consejo de Federaciones Mexicanas en Norteamérica), Project Amiga, and The City Project. These groups will be instrumental in helping the San Gabriel Mountains Forever Campaign (of which the Sierra Club is a partner) reach new audiences made up of mostly underserved and working-class communities. As such, they are approaching public lands work in the San Gabriels through the lenses of health and a lack of recreational opportunities. By having a strong, diverse, and capacity-filled coalition, we hope to achieve our vision of permanently protected wild lands and rivers in the San Gabriel Mountains, and expanded resources for healthy, sustainable, recreational opportunities there. A robust coalition will reach out to greater numbers of people and communities, and this will be the key in leaving behind a legacy of environmental stewardship that reflects the diversity of the greater Los Angeles area.

Sierra Club staffer Jasmin Vargas has taken the lead in building a new Central San Gabriel Valley team that will house volunteers from that geographic area, which is home to large Latino and Asian American communities. The Sierra Club team is also helping develop materials, presentations, and programs that speak to social justice concerns such as health issues, lack of open space, and equity in recreational opportunities—all issues that are appealing and meaningful to the communities in question.

WATER SENTINELS

Tim Guilfoile, deputy director of the Sierra Club's Water Sentinels program, and Rick Clewett, a longtime Kentucky Chapter volunteer leader, have spent many hours in eastern Kentucky in the last three years. Along with John Cleveland, a former Sierra Club organizer eastern Kentucky who died three years ago, Guilfoile and Clewett discovered an illegal valley fill—essentially a mountaintop that had been blasted to smithereens and dumped in the adjacent valley. The settlement from the litigation brought by the Sierra Club is now resulting in the largest reforestation project in Kentucky's history. The Appalachian Mountains, which include eastern Kentucky, are the oldest mountains in the United States and represent the largest wildlife corridor east of the Mississippi. The Sierra Club is working with the Interior Department's Appalachian Regional Reforestation Initiative (ARRI) and other partners to change existing cultural, technical, and regulatory barriers surrounding the forestry reclamation of coal-mined lands. Some examples of the barriers ARRI and the Sierra Club are seeking to change include:

- CULTURAL—change the perception that tree-planting is more expensive and risky than conventional reclamation; provide education about the impacts of compaction; change the perception of what good forestry reclamation should look like
- TECHNICAL—eliminate excessive surface compaction, ground cover competition, and inappropriate growth medium; plant high-value hardwood trees
- REGULATORY—change the perception that regulations impede effective reforestation techniques and interfere with bond release

ACKNOWLEDGEMENTS

This handbook was produced by Sierra Club's Resilient Habitats Campaign. Founded in 1892, the Sierra Club is America's oldest and largest grassroots conservation organization.

RESILIENT HABITATS CAMPAIGN LEADERSHIP TEAM:

Fran Hunt	Don Parks
Bill Arthur	Marion Klaus
Jeff Gantman	Athan Manual
Connie Wilbert	Catherine Semcer
Jill Workman	Paul Wilson
Bruce Hamilton	Robert Heil

HANDBOOK CONTRIBUTORS:

Fran Hunt	Don Parks
Catherine Semcer	Vicky Hoover
Ginny Cramer	Rob Smith
Roger Singer	Liz Pallato
Sarah Matsumoto	Bob Clark
Nathaniel Shoaf	Sascha Paris
Juana Torres	Tim Guilfoile

HANDBOOK REVIEWERS:

Bruce Hamilton	Joe Fontaine
Mary Wells	Edwina Allen
Fran Hunt	Marion Klaus
Bill Arthur	Mark Heileson
Steve Thomas	Tom Valtin
Matt Kirby	Activist Network Wildlands Team
Don Parks	Sierra Nevada Resilient Habitats Team
Jim Blomquist	Resilient Habitats Leadership Team

Sierra Club National
85 Second Street, 2nd Floor
San Francisco, CA 94105
(415) 977-5500

Sierra Club Legislative
50 F Street, NW, Eighth Floor
Washington, DC 20001
(202) 547-1141

www.sierraclub.org
facebook.com/SierraClub
twitter.com/sierra_club