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# Getting from Here to There: An Outline of the Wildlands Reserve Design Process

David Johns

*Portland State University, johnsd@pdx.edu*

Michael Soulé

*University of California - Santa Cruz*

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# Getting from Here to There

*An Outline of the Wildlands Reserve Design Process*

by David Johns and Michael Soulé

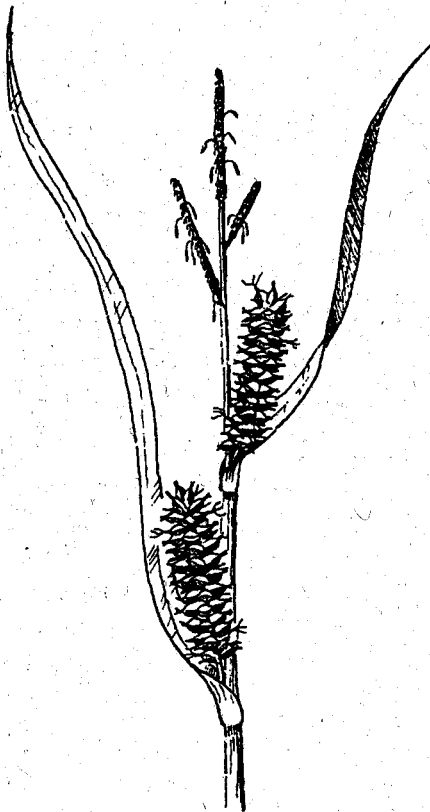
**T**urning back the assault on the natural world is a monumental and complex task; even the first step—planning a network of reserves—is an enormous undertaking. This paper is intended as a general guide to the steps needed to produce a regional proposal for a Wildlands reserve system. It is based on an assessment of work underway in some regions, and extensive discussion with regional groups throughout the continent. The process will change with experience. Each region of North America is unique biologically and culturally, so for each region the process of developing a reserve system will vary. Think of the outline below, then, as a preliminary check list of important elements in the process and of what you and Wildlands staff may bring to the process.

In the following, you will note several important themes. One of these is *scientific credibility*. Our vision for recovery and protection of wildness and diversity is based on conservation biology and related principles. Our reserve designs must be based on the long-term needs of wolves, salmon and many other creatures. Our designs must consider the life history requirements, demographic dynamics, genetic viability, dispersal behavior, and other aspects of their fitness. Our proposals must stand up to review by outside scientists. They need to be as “bullet proof” as possible.

Another important theme is *broad-based support*. Being morally and scientifically right is not enough. Policy-makers ignore what is right all the time. Both the conservation community and the public must understand and support Wildlands proposals for them to be successful. This means people need to be involved in the process, not just have a completed proposal presented to them. It means thinking about who our potential allies are and bringing them on board sooner rather than later. It means ideas flow *both ways*, not just from activists and scientists to the public. It does not mean we relinquish our values.

Indeed, we must keep our *values* in the forefront. We are talking about creating a new vision for North America: one based on biological health; one that says “yes” to the web of life and all of our co-voyagers. Most human beings feel connected to the earth and appreciate that all life should be free to follow its evolutionary path. We must deepen and inform that feeling, try to make clear what must be done to protect that freedom.

*Professionalism* is important. Along with good scientists, we need organizers, fundraisers, public speakers, community leaders, artists, writers, mappers, and others. We need to identify people with these skills and bring them in. The generalist grassroots activist remains the backbone of our effort, but we need specialist skills as well.



*Beaked Sedge (Carex rostrata) by Gary Bentrup*

Finally, there is *funding*. Creating Wildlands reserve networks will not happen without funds. While The Wildlands Project cannot fund the regional reserve design process, staff can help with fundraising. Developing a strategy to secure financial support for regional reserve design must be a priority.

In reading the outline and the sections below that accompany each item in the outline, please keep in mind the variability of regional contexts—ecologically and culturally, as well as in terms of how much reserve design work activists in the

descriptions of others' experiences designing reserves, and lists of experts. Please contact the Tucson office for such information. Also please keep us informed about your work so we can share it with others.

### Hold initial workshops.

Initial meetings should bring together key people in the region and Wildlands staff. A good size is 30-40 people. This is not a place to debate the need for the vision—participants should already be committed. Workshops will assess biodiversity in the region and threats to it, the status of conservation work, and how Wildlands reserve design can build upon existing efforts.

Without making the meeting unwieldy in size, workshops should include activists and skilled committed professionals. It is important to reach out and be responsive to those interested. Wildlands reserve design excites people, but the excitement wanes if we do not have ways for people to participate.

Among potential key players in each region are:

- grassroots wilderness, conservation, and wildlife groups, including those from indigenous communities
- recreation groups (hikers, boaters, hunters, etc.)
- chapters of national and international groups like Sierra Club, The Nature Conservancy, The Wilderness Society
- scientists, chapters of the Society for Conservation Biology, Society for Ecological Restoration, the Wildlife Society; university biology, zoology, botany, ecology, wildlife departments
- staff from natural resource and conservation agencies
- individuals with a wide range of skills who have a strong commitment to wilderness and biodiversity, including lawyers, economists, media people, and business people
- potential funders

### Identify or establish an organizational structure for wildlands work.

One of the products of the initial meeting(s) needs to be an organizational structure that can oversee planning in the region. Such a structure may utilize existing groups for legal or non-profit status, but should have a coordinating committee focused exclusively on Wildlands reserve design. This committee should represent the

FUNCTION	U — Undertake	suggested TWP responsibilities	suggested regional responsibilities
	S — Provide support, advice		
■ Hold initial workshop		U	U
■ Identify or establish organizational structure for wildlands reserve planning, including non-profit status, directing, monitoring & review of work		S	U
■ Develop work plan describing steps regional players will take to produce a reserve design covering each element: <ul style="list-style-type: none"> <li>• Science/mapping strategy</li> <li>• Grassroots mobilization</li> <li>• Funding strategy</li> </ul>		S	U
■ Implement funding strategy		S/U	U
■ Develop community relations strategy for important groups in the region (landowners, agencies, others)		S	U
■ Locate and obtain existing biological information		S	U
■ Identify information gaps; gather information to fill gaps		S	U
■ Identify ecosystem types and key species		S	U
■ Analyze biological information		S/U	U
■ Develop preliminary map and narrative		S	U
■ Conduct preliminary joint review and revision		U	U
■ Peer review		U	U
■ Publish drafts for wider community review; hold community meetings		S	U
■ Analyze economic impact of reserve proposal		S	U
■ Revise reserve design based on initial community comment, economic analysis and other input		S	U
■ Publish "final" proposal		U*	U
■ Develop and implement campaign strategy, including goals for first ten years; hold press conference to launch campaign		S/U	U

\*(Wild Earth)

region have already done and what resources they (you) have. Some regional groups have nearly completed the early steps listed in the table; others are just beginning. Wherever you are in the process, the Project has material that may help you with reserve design, including sources of biological information, de-

various constituent groups in the region who are committed to wildlands goals, including those just listed. Geographic areas within the region should all be represented if possible, as should important skills such as organizing, fundraising, public relations, and field biology. The coordinating committee, and possibly its staff, will be the ones primarily working with Wildlands staff.

#### **Develop regional work plan for reserve design.**

The coordinating committee should develop an action plan for reserve design in the region, to be approved by groups participating in the process. The plan should outline who will do what and by when. It should address three broad areas: gathering and analyzing biological information and mapping reserves based on this information; involving various organized groups and the public in the process at the appropriate times; and identifying the resources needed to complete reserve design and begin a campaign to obtain these resources. Some of the major elements in each of these areas are noted below.

The plan should also make clear how and when progress will be assessed. Plans must be open to revision. Priorities and objectives should be revisited periodically.

#### **Implement funding strategy.**

Identify potential sources of support for Wildlands work, including foundations, major donors, membership, and events. Usually these sources will be different from support received by local or regional groups for ongoing efforts. Project staff can provide recommendations on potential sources of support. Consider joint fundraising efforts between cooperating regional groups and The Wildlands Project. Funders like to see groups working together.

After finding potential funding sources, write grant proposals, contact major donors, and plan events. Develop a budget that demonstrates to funders how support will be spent, what the product will be, and why it is important. (A budget is also an essential part of the work plan, and provides us one means of gauging progress.) Plan funding events around milestones in the design process.

Combine outreach and education with fundraising. If people support us, they will open their wallets. If they don't open their wallets, their support is not deep and we need better ways to reach them.

#### **Identify important groups in the region.**

Who should be involved in the process and when? Identify and reach out to various sectors of the community that are likely supporters or neutral. The wildlands process should be as inclusive as possible without compromising our principles and goals. To have a broadly understood and supported vision for a reserve network, people must be involved in the process. A product produced behind closed doors can alienate potential friends. On the other hand, it's not possible to

involve everyone from the very beginning. It is useful to hold a community meeting to display a draft product, and invite people to improve it.

A community relations strategy also needs to anticipate criticism and its sources, and develop creative ways to preempt or respond to it. See publishing section below for additional ideas on public outreach.

#### **Locate and obtain existing biological information.**

A first step in the reserve design process is to obtain needed biological information. Important kinds of information for reserve design include existing and historic vegetation and soils, existing and historic distribution of animal species, ownership and current protection, watersheds and hydrography information, ecoregions, and disturbance regimes. More detailed recommendations are available from project staff.

A warning: Don't become a data junkie. An overwhelming amount of information is available—more than we can ever assimilate and use. We must choose what information to compile, keeping in mind our limited budget and timeframe.

#### **Identify information gaps and fill them.**

Conduct or sponsor research to fill gaps in biological information. Verify information received from other sources, since it is often out of date. This is an excellent opportunity to involve volunteers in efforts to check, for example, information on old-growth stands; or to have people verify animal movement corridors across roads or other obstacles. Gathering needed biological information can also be done as Ph.D. projects undertaken by graduate students. Here again, we must be realistic about resources and time frames. We are trying to complete regional reserve designs in a three-year period. Our goal is to have a draft plan for North America by 2000.

#### **Identify ecosystem types and key species.**

Because our approach emphasizes wilderness and the ecological roles of large animals, we must consider their past and present distribution individually. These species include, depending on the region, River Otter, Beaver, Alligator, turtles, Grizzly Bear, Black Bear, Gray Wolf, Cougar, Bobcat, Lynx, Coyote, Kit Fox, Wolverine, Fisher, Marten, Musk Ox, Bison, Caribou, Pronghorn, Elk, Moose, Bighorn Sheep, Mountain Goat, salmon, Marbled Murrelet, cranes, raptors and others. In addition, we are concerned about biodiversity in the broader sense of viable populations of all native species and perpetuation of all natural processes. Accordingly, we aim to classify ecosystem types and ensure enough of each type of ecosystem is included in protected areas to restore it to health and allow it to retain its diversity.

The Wildlands Project is currently working with World Wildlife Fund and others to complete an ecosystem classification for North America. It is largely complete for Canada and Mesoamerica, but must be finished for Mexico and the US. This information will be provided to groups when available.

## Analyze biological information.

Analyze biological information on key species and ecosystems to determine what areas must be strictly protected, where corridors should be, how much needs to be protected and where, what are the compatible uses in buffers, and so on. Answers to these questions involve making judgments and will vary by region. It is important to take into account ecosystem succession in reserve design.

Information should not simply be analyzed by a small elite group. The knowledge, skills and experience of ecologists and biologists will play a big role, but the values and experience of activists and other non-scientists are central. Make information accessible to non-scientists and encourage wide-ranging discussion.

## Develop preliminary map and narrative.

The objective is to map reserves, corridors, and buffers based on analysis of the biological information, and to explain that map and information underlying it in narrative form. The maps should show what is needed to achieve our four fundamental goals of maintaining all native species, ecosystems, ecological processes, and resilience. Maps should set priorities as well—here is what we want to protect in 5, 10, 50 and 100 years. Narratives may need to be produced for both a scientific audience and the general public. Narratives need to be clear about our values and goals, and the way in which creating protected areas helps realize these goals.

Keep preliminary maps straightforward. Maps have great power, but can easily be made too complicated. Initially most maps will be at 1:500,000 or 1:250,000 (1:1,000,000 for parts of Canada) and detail may be lacking. Issues of scale and detail are important and we will need to work together to resolve them.

A word on Geographic Information Systems (GIS) or computer mapping: increasingly, much information is only available in computer format. Sharing, reproducing, and changing maps is easier in computer format. Linking maps to underlying information is most easily achieved in this way as well. Computer mapping can be very expensive and intimidating, but there are knowledgeable people in almost every part of North America

THE WILDLANDS PROJECT staff has compiled a selection of papers that we have dubbed the "Reserve Design Framework Package." We will make this information available to cooperating organizations and individuals upon request. This and future updates will be mailed from the Tucson office and any solicitations should be made directly to Tucson.

The framework package will help answer the many important questions surrounding the reserve design process. The material will come to you "handsomely bound" in a three-ring binder which can be expanded as new elements are added.

We would prefer to send this out free of charge, but much of the content is made up of booklets and copied papers that cost the Project in actual cash outlay and in staff time. So we are asking that those interested in the package donate \$25 to help defray mailing, handling, and material costs. For more information and a detailed accounting of content and cost, please contact Rod Mondt at The Wildlands Project, POB 5365, Tucson, AZ 85703; (520) 884-0875.

A partial list of contents\* for the Framework Package, soon to be available from TWP:

## Conservation Strategy

"The Wildlands Project Land Conservation Strategy," by Reed Noss

"How to Design an Ecological Reserve System," by Stephen Trombulak

Marine reserve design guidelines

Articles from *Wild Earth* and other sources on reserve design process: North Cascades, Columbia Mountains, Sonoran Desert/Gulf of California, Yukon, Yellowstone to Yukon, Alaska, Florida, Southern Appalachians, Maine Woods.

Guidelines for undertaking ecosystem representation analysis

"Maintaining Ecological Integrity in Representative Reserve Networks," by Reed Noss

"Endangered Ecosystems of the United States: A Preliminary Assessment of Loss and Degradation," by Reed Noss et al.

"A Protected Areas Gap Analysis Methodology: Planning for the Conservation of Biodiversity," by Stan Rowe et al.

Ecosystem representation analysis in Mexico, by David Olson and Eric Dinnerstein

Reference sheet for protecting Canada's endangered spaces by Monte Hummel et al.

Guidelines for identifying key species, terrestrial and marine

"Large Carnivore Conservation in the Rocky Mountains," by Paul Paquet and Arlin Hackman

Society for Conservation Biology presentations by Paul Paquet and Tim Clark

Corridor design model, by Steve Minta

## Mapping

Guidelines for mapping, including data layers, scale, record keeping, mapping standards, by Jim Stritholt

List of GIS labs where services can be obtained

Sources of biological information, strategies for acquisition, by Jim Stritholt and David Johns

Ground-truthing strategies

Mapping marine reserves

Remote sensing, by Jim Stritholt

Case studies of mapping reserves

Guidelines for preparing proposals for peer review and integrating responses from review, by Reed Noss and Jim Stritholt

## Political Strategy

Guidelines for involving various groups (conservation, environmental, community, scientists, agencies, etc.) at early stages to ensure broad support without compromising goals. Who are our friends, who are our enemies; who are potential friends, potential enemies; who should we focus outreach on?

Preparing media and outreach materials

Use of The Wildlands Project name in regional work, by David Johns

Conducting economic analysis

List of economic consultants

Community relations strategies

List of community relations consultants

Klamath-Siskiyou community relations strategy, by Kelpe Wilson

## Implementation of Reserve Networks

Reference Sheet for *Preserving Family Lands*

"Using Conservation Easements in Creating Regional Reserve Systems," by Brian Dunkle

List of land trusts

"UN Biodiversity Convention and Existing International Agreements," by Chris Wold

## References and resource lists on biodiversity, mapping, corridors, sources of materials (e.g., base maps)

Contacts from other regions

"Non-Profit Organizations, Public Policy, and the Process: A Guide to the Internal Revenue

Code and Federal Election Campaign Act," by B. Holly Schadler

"Putting on a Conference: Checklist of Tasks." Originally compiled by the CU Environmental Center, revised by TWP

"Becoming a Better Media Resource," by The Wilderness Society

\*Not listed here but also to be included in the framework package are many articles from this and previous editions of *Wild Earth*

who can help. Paper and mylar are not extinct, but they are threatened; nonetheless, a great deal can be accomplished with them. Lack of access to GIS should not halt those who want to go forward with mapping.

#### **Conduct preliminary joint review and revision.**

Before a reserve proposal is taken to a broader public or sent out for scientific review, it should be reviewed internally. All participating groups and individuals should be part of discussions on the proposal: does it meet our goals; have we done our homework; does it tie in to reserve design work in adjacent regions? Wildlands staff will also offer comments, and try to ensure that the proposal is consistent with other efforts, that the science is rigorous, and that it enjoys regional support. Based on comments and identified shortcomings, the proposal can be revised. Such review will be ongoing, as regional groups, local people, and project staff interact throughout the process of reserve design.

#### **Peer review.**

Review by outside scientists is important. It will point out problems in our reserve proposal, enabling us to improve its rigor and credibility. One way to obtain peer review is through the publication process of major biological journals. Before acceptance in such journals, manuscripts are critiqued by experts in the field, and revised to accommodate or respond to criticisms. Another means of review is to simply ask scientists with expertise to review the proposal. In either case, review can take several months. So that the proposal can be properly reviewed, keep good records on sources of biological information, its verification and analysis, and the steps from information to maps.

#### **Publish drafts for wider community review.**

At the same time as, or following, peer review, take the draft proposal to the wider community. One way to do this is through a series of community meetings. These may be informal, where members of regional groups invite people to their homes to discuss it. Consider also civic or service club meetings. Calling public meetings may also be useful.

In organizing these meetings, get the help of community relations experts. For meetings early in the process, keep control of the venue: shouting matches with wise-use types are not educational. The goal of these meetings should be to present our findings and ask people how we can improve our conservation proposals. We have to make clear the product we're bringing to people is a draft, not final. The more people who hear about our proposal from us, rather than from the opposition, the better.

Think of the process as creating an ever expanding circle of people who understand and support wildness and biodiversity: networks of people defending networks of land and water.

#### **Analyze economic impacts.**

After completing a draft proposal, have an economic impact analysis done. The strongest objections to protection proposals will come from the extraction industries and people who love or make their living from motors. Economic analysis of wilderness and improved protection in the US Pacific Northwest has shown that areas are economically healthier the less dependent they are on extractive industries and the more biologically intact they are. Expose the subsidies extractive industries receive and the other tolls they take on our lives and the lives of other species. Often industries paint conservationists as outsiders to a region, when in fact the companies are multinationals, making their decisions thousands of miles away for the good of wealthy stockholders, not for the good of the community. Show how our proposals will improve the quality of life in the region.

#### **Revise reserve design based on initial community comment, economic analysis and other input.**

Revise the proposal to incorporate suggestions that help us better reach our goals. The revision process is not about compromise or backing away from our goals. We need to put before the people of North America an alternative vision, of a biologically healthy continent. Self-censorship would be self-defeating.

#### **Publish "final" proposal and launch campaign.**

As the final proposal is put together, including maps, pamphlets, narratives—perhaps also slideshows, videos, press packets—a campaign strategy for implementation should be developed. Address immediate goals for implementation and the means (private lands incentives, changes in management of lands, public land purchase, education). Launch the final proposal at local and regional press conferences attended by important scientists, community leaders and others. Provide materials such as maps, press releases with quotable quotes, *Wild Earth*, and regional publications, recognizing the differing needs of television and print media. Be sure materials are available for the general public as well. Most important, be sure a structure is in place to take advantage of people's desire to do something on behalf of what they love. The public relations strategy should include plans on how to rapidly respond to disinformation campaigns.

Love of nature, boldness of vision, sound organization, and prudential planning will triumph. ■

*David Johns and Michael Soulé are co-founders of TWP. David currently serves as Executive Director of TWP and also teaches political science at Portland State University. Michael is chair of TWP board of directors and is also a co-founder of Society for Conservation Biology, chair of University of California at Santa Cruz's Environmental Studies Department, and author or editor of numerous publications in the field of conservation biology.*