REVISION
chugach national forest land & resource management plan

inside
Alternative Development
How to Reach Us
Points of View:
Chugach Electric Investigates Wind Power
Subsistence on the Chugach
We Need Your Help!

newsletter
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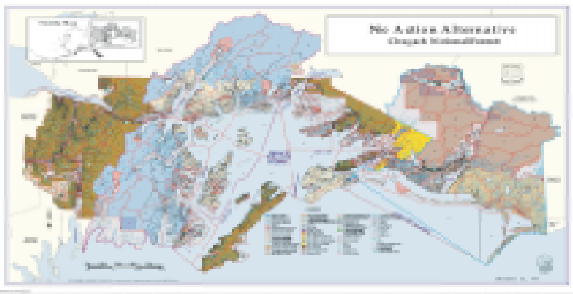
The Alternative Development Process

by John DeLapp, Ecologist

As many arrows, loosed
several ways, come to one
mark ... so may a thousand
actions, once afoot, end in
one purpose.
Henry V, Act I, sc. 2.

On December 20th, Chugach National Forest Supervisor Dave Gibbons approved a range of alternatives. Alternatives A - F and the existing "No Action" alternative will be analyzed in detail, alternatives 6 and 13 will also be included but not analyzed in detail. From these alternatives a single preferred alternative will be selected or derived. Maps and associated narratives for each are available for viewing at District Offices, the Supervisor's Office, and on the Revision website: < http://www.fs.fed.us/r10/chugach/revision >. This culminates a period of intense activity both on the part of the public and the interdisciplinary team which was charged with the task of developing an initial set of 30 alternatives and then reducing those to the above nine.



The short paragraph above belies a great deal of work. A brief description of the development of the thirty alternatives (some similar, some very different) and the process of reducing them to a more manageable nine follows.

In July of 1999, 500MB of resource data were distributed to the public via cd-rom as an aid to development of draft alternatives. Approximately 100 ArcView GIS coverages on the cd-rom included information such as land ownership, roads, trails, anadromous streams, subsistence areas, brown bear and moose habitat, mineral potential, vegetation cover types, and tentatively suitable timber. With the help of this and a variety of other information sources, thirty alternatives were developed by the IDT, USFS District personnel, and the public. These thirty alternatives consist of:

1. The existing Plan (No Action Alternative).
2. Eight alternatives developed by the IDT and CNF District and SO personnel to serve as "starting points" to aid members of the public in the development of their own alternatives.
3. Eight alternatives developed by individuals or groups of individuals unaffiliated with any established organization.

4. Thirteen alternatives developed by organizations or groups of organizations.

To aid in the synthesis of these alternatives, a computer-based cluster analysis of spatially explicit data, (the prescription applied to each planning unit for each alternative) was conducted to objectively identify groupings of similar alternatives. While this provided a quantitative means of aggregating alternatives, it was not without its shortcomings. There was a level of public concern that the process lost important details that, while of a limited geographic extent, were critical to the theme of the alternative. For this and a variety of other reasons this method was used only to identify possible common ground between the various alternatives.

The primary means of grouping similar alternatives was a structured method of scoring and grouping of alternatives by the Interdisciplinary Team (IDT) with public input. These clusters were based on an evaluation of where each alternative was deemed to fit on a relative scale for each of the following five situation statements:

- Ecological Systems (natural processes - active management).
- Fish and Wildlife Habitat (natural processes - active management).
- Recreation/Tourism (non-motorized - motorized, fewer facilities - more facilities, undeveloped settings - developed settings).
- Resource Development (personal use - commercial harvest, recreational gold panning/restricted access/withdrawn - mining encouraged).
- Administrative and Congressional Designations (no designations - many designations).

Each of these groupings was then reviewed by alternative authors as to the appropriateness of their classification and moved to another grouping if deemed necessary.

The IDT formulated a composite alternative for each group. The composites were derived from components of each of the alternatives in a group, ultimately evolving into the six draft alternatives, A - F. Each draft composite alternative was then reviewed by the IDT, resource specialists, district staff, representatives of other agencies, land owners, and native governments to check for consistency with available resources and the theme of each alternative. In some cases relatively minor edits were made. Authors of each composite alternative were then given an opportunity to review and comment on all changes. A summary of these alternatives is presented in the table on the following page.

The next step is to define or select a preferred alternative from within this approved range. It is very likely that this will not be any single alternative as presently written, but rather will consist of elements drawn from the various alternatives within the range. Dave Gibbons, the Forest Supervisor, will provide us with this preferred alternative by the end of March, after considering many factors such as the preliminary science findings and potential environmental consequences. There will be ample time for public comment. So stay tuned!

Approved Range of Alternatives, (Alternatives A-F and No Action to be analyzed in detail, Alternatives 6 and 13 not to be analyzed in detail).

Alternative Themes		Range of Alternatives							
Situations	**No Action Alternative**	**Alternative 6**	**Alternative A**	**Alternative B**	**Alternative C**	**Alternative D**	**Alternative E**	**Alternative F**	**Alternative 13**
Ecosystems	Mix of active and natural processes to sustain ecological systems.	Active management to restore and maintain ecological systems.	Active management to sustain ecological systems.	Active management to sustain ecological systems.	Mix of active management and natural processes to sustain ecological systems.	Maintenance of ecological systems through conservation of fish and wildlife habitats, natural landscapes and naturally occurring disturbance processes.	Natural landscapes and processes to sustain ecological systems consistent with local preferences.	Maintenance of ecological systems through an active mix of conservation of fish and wildlife habitats, natural landscapes, prescribed burns, reforestation and naturally occurring disturbance processes.	Minimal human intervention. Natural processes dominate. Landscape structure, biodiversity, and ecological functions are neither specified nor controlled.
Fish & Wildlife	Mix of active management and natural processes to maintain or enhance habitats.	Maintain or enhance habitats.	Active management to sustain habitats.	Active management to maintain or enhance habitats.	Mix of active management and natural processes to maintain or enhance habitats.	Mix of active management and natural processes to maintain or enhance habitats.	Natural processes for the conservation of habitats of fish and wildlife species.	Natural processes to sustain and conserve habitats of fish and wildlife species.	Habitat conditions and relationships favor late succession species.
Recreation & Tourism	Mix of motorized and non-motorized opportunities, recreation facilities and undeveloped/ developed recreation settings.	Motorized opportunities improve access for all uses. Facilities.	Motorized opportunities, recreation facilities and developed recreation settings.	Motorized opportunities, recreation facilities and developed recreation settings.	Mix of motorized and non-motorized opportunities, recreation facilities and undeveloped/developed recreation settings.	Mix of motorized/ non-motorized adjacent to communities & established roads. Non-motorized in backcountry areas, small groups, minimal facilities, natural quiet. Reduced noise campgrounds. Helicopter access where conflicts minimal.	Non-motorized backcountry, minimal recreation facilities, natural quiet, and undeveloped recreation settings.	Mix of motorized and non-motorized recreation opportunities adjacent to communities. Non-motorized backcountry, undeveloped recreation settings with minimal facilities.	Access is allowed for low impact recreation and for non-consumptive activities in undeveloped settings.
Resource Development	Provide for personal use forest products and commercial forest products. Emphasize mineral development.	Provide personal use and commercial opportunities	Provide a mix of personal use and commercial forest products. Emphasize mineral development.	Provide a mix of personal use and commercial forest products. Emphasize mineral development.	Provide personal use forest products throughout the forest and limited commercial forest products. Emphasize mineral development.	Personal use of forest products, small-scale commercial forests products within ¼ mile of roads.	Personal use and small commercial sales forest products close to roads and communities.	Personal use forest products, small-scale commercial opportunities. Access to subsistence resources.	Non-consumptive activities in undeveloped setting. Commercial consumptive uses discouraged.
Special Designations	Recommended Wilderness designations within the Wilderness Study Area. No Wild or Scenic River designations.	No special designations.	Minimize recommendations for administrative and congressional designations.	Minimize recommendations for administrative and congressional designations.	Minimize recommendations for administrative and congressional designations.	Diversity of habitats within wilderness areas in PWS, CRD, and Kenai. Moderate level of Wild and Scenic River and RNA designations.	Wilderness, Wild and Scenic River, and RNA designation to maintain the integrity of wildlands and protect important fish and wildlife habitats.	Wilderness, Wild and Scenic River, and RNA designation to maintain the integrity of wildlands & protect important fish and wildlife habitats.	Long-term resource protection through congressional and administrative designation.

Chugach Electric Investigates Wind Power

By: Phil Steyer, Member Relations Manager, Chugach Electric Association, Inc.

For more than a year, Anchorage-based Chugach Electric Association has been monitoring the winds at different locations – including a site in the Portage Valley near Chugach National Forest lands.

"We've collected good information on wind speed and direction, as well as temperature," said Steve Gilbert. Gilbert is the Chugach engineer in charge of the technical investigation.

In recent years many utilities around the country have incorporated wind power and other renewable energy resources into their power grids. Wind power is usually more expensive than conventionally produced electricity, but the incremental cost is frequently paid for by customers who voluntarily sign up to support the clean, renewable technology. Chugach's own surveys have shown there are a significant number of customers here who would like to see wind powered generation on the system – even if it meant paying a little more on their monthly bills. "Customers want choices," Gilbert noted. "Even from their electric utility."

In the spring of 1998, Chugach brought to Alaska a "wind prospector" – one of a handful of consulting meteorologists who make a living helping utilities and others find the best sites for wind-powered generators worldwide. Working from maps, weather records, field visits and interviews, Chugach's consultant identified a list of sites that Chugach eventually pared down to 10 possible locations for further investigation.

In October 1998, after securing permission from land managers, Chugach put up temporary

meteorological towers ("met towers" for short) at two locations to record wind speed, wind direction and temperature around the clock for a year. One tower was installed on a site under U.S. Army control near the old Nike missile site at the head of Arctic Valley Road on Fort Richardson. The other met tower went up on Alaska Railroad property in the Portage Valley.

Each met tower was essentially a heavily guyed, 40-meter, 6-inch pipe on a base about the size of a pizza pan. Near the base of each met tower was a box containing a solar/battery powered computer to store the data collected every 15 minutes around-the-clock, and a cell phone that made a daily call to Gilbert's desktop computer at Chugach headquarters to download the information.

In October 1999 Chugach took down its met tower on Fort Richardson. The utility arranged for an extension at its ARR site in Portage, and improved its data-gathering capability at the site by installing a heated anemometer at the top of the tower. That will help Gilbert better estimate the impacts icing would have on a turbine's operation and output.

In addition, Chugach has also installed some instrumentation at two of the other sites on its original list of 10. At a site it calls Potter Bluff– a windswept ridge above the Seward Highway about two miles south of Potter Marsh – Chugach erected a 10-meter mast with a single anemometer and thermometer on private property. Gilbert also has added anemometers and a thermometer on an AT&T tower at Bird Point. Both of these new sites also report in daily to his computer, adding to the database he is building.

Chugach is still in the data-gathering mode, and as yet has not made a decision about whether or not it will try and bring wind power to the market. In order to better understand the willingness of customers to sign up to support the technology, Chugach also recently sent a brochure and sign-up card to customers with its bills.

A decision to install wind turbines has not been made however, if Chugach does decide to move forward and attempt to site wind turbines, it is unlikely that its installations will look much like the giant wind farms built in the 1970s with hundreds of turbines.

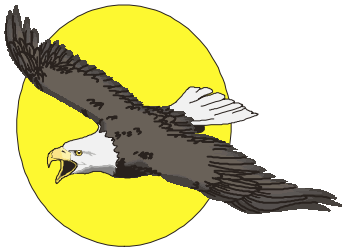
"What we foresee is probably going to be small clusters of wind turbines possibly at more than one site," Gilbert said. "One of the questions we usually get when we make public presentations about wind power is 'How many machines?' Many people have seen those wind farms and wonder if that's what we have in mind. We're not thinking along those lines at all."

Gilbert also notes that for economies of scale, he envisions that three wind turbines would be the minimum he would recommend building at any site. While the actual total would be sized to meet customer requests, the capacity of any site would probably be limited to a cluster of eight or ten turbines.

The newer wind turbines that Chugach would consider have a lot of strong points. Concerns about noise and bird strikes have largely been addressed by slowing down the blades. The machines Chugach has considered turn at only about 28 revolutions per minute. Also, land use under and near the machines is usually not restricted. Chugach would use tubular towers about 20 feet in diameter at the base. "Hub height" to the turbine (in other words, the vertical elevation to the horizontal centerline of

the machine on top of the tubular tower) would probably be in the range of 130-150 feet. Each of the three blades would be approximately 60 feet long, which would mean there would be about 70 to 90 feet of room between the ground and the bottom tip of a blade.

"We fully expect that permitting any site may not be easy," Gilbert said. "But we also know we have customers who may expect us to try." "Wind power has a lot of positives," Gilbert noted. "It's clean, renewable and doesn't prevent other uses of the land. It would augment – not completely replace – conventional generation. Wind power would be used to offset generation from Chugach's natural gas fired combustion turbines. Therefore, every kilowatt-hour generated with a wind turbine would lead to lower emissions. -end-



The Chugach, Seen From the Eye of an Eagle – Subsistence, a Natural Use of the Resources Within the Chugach National Forest

By Carol Jorgensen, Assistant Forest Supervisor, Tongass National Forest, Petersburg

As a Native working for the Forest Service, and an Eagle/Killerwhale Fin, of the Tlingit Tribe, I thought I would share one of many different Native perspectives of what subsistence means to the Native and non-native people living in the rural areas, and why it is an important use of the resource throughout the Chugach National Forest.

The Chugach is the second largest forest in the United States. Within the Chugach you will find some of the most wild and scenic country in Alaska, consisting of magnificent glaciers, and steep rugged mountains overlooking rocky beaches. How we care for this land and serve its people dictates the legacy we will leave behind as land managers.

Today, as we talk about forest planning, we use words such as sustaining ecological systems, ecosystem management, biodiversity, timber management, old growth forest, fish, wildlife and plant management, and integrating diverse publics into all of this planning process. Given the history of the Chugach Forest, subsistence is a vital ingredient that must be fit into the equation as we develop these plans.

Historically, Native people have lived on this land for thousands of years, living in concert with Mother Earth. Survival dictated that Native people coexist with the resources, in a way that both fear and respect for the environment bonded them to the land. Examples of this are the beautiful crests and carved implements which portrayed the spirit of that animal, bird, or fish. Conservation of the resource was practiced, and clans took care of portions of the forest and its inhabitants depending on where they lived. With the coming of spring, people would clean and clear areas for wildlife. This was a way of showing respect and maintaining a relationship to the land. The passing down of tradition science and education was the entire clans responsibility. This was done through stories, dance and actions, and depicted in the are of the various implements used in day to day living.

People used everything, for example large clam shells were bowls, and implements were carefully carved from bone and ivory. To this day we are taught to give something back as we take

something away. This way of life has transcended down for thousands of years and depends on the blueprint of our ancestors, and our ability to be able to hand it down to our children and grandchildren.

Non-Natives living in rural areas of the Chugach also depend on the wildlife resources much like the Native people. They too have a great respect for the resources and an essential need to provide for their families. They know that proper care for the resources ensures their ability to be able to maintain their way of life.

One of the primary purposes of Federal protection (Title VIII, of the Alaska National Lands Conservation Act) was the customary, traditional and social uses of the resources for villages and communities as a priority over other uses such as sport and commercial use. Economics is not the driving force for people who depend on subsistence. Being able to maintain the health of Mother Earth through conservation of the resources, while providing sustenance to the body, mind and spirit is critical for the preservation and continuance of culture and life in the Chugach Forest. In other words, in Native way, the Chugach depends on the people, just as the people depend on the Chugach.

As land managers and conservationists, we must listen and learn from our public. Our responsibilities are very complex, challenging and rewarding. Proper planning on our part will ensure cultural preservation, bountiful resources, and multiple use within the ecological system of this beautiful forest; and the eye of the Eagle will continue to span the Chugach for centuries to come.

Gunal Cheese Ho Ho

We Need Your Help!

The draft Forest Plan and Environmental Impact Statement is scheduled for completion in late spring or early summer of 2000. We would like to get an idea of how many copies to produce for public distribution. It will be available in four formats: hard copy (full set of Plan and EIS), short summary copy, CD-ROM, and on the web. A full set of hard copy documents costs between $125 - $150 to print and mail so we would like to limit the number we produce. A short summary copy will cost between $2 - $5 and the CD-ROM version only $5 - $7 per disk to produce and distribute.

Computers are available at all Forest Service offices for public use in reviewing the CD-ROM or web versions of the documents. They are also available at some public libraries and other public locations.

Please return the enclosed postcard to us by April 1, 2000 and specify which version you would like mailed to you. If you don't return this postcard you will still be able to review the draft documents on our web site or request a copy of the CD-ROM version at a later date. However, we will only produce as many hard copy full sets as requested by the return of this postcard. We appreciate your response!

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