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## Our National Forests: Values Other Than Timber

Chief Mike Dombeck, USDA Forest Service  
Conservation Roundtable  
New York, NY  
September 19, 2000

*Extra*

Thank you very much for asking me to share with you my vision for America's forests in the 21st century. For more than a century, Americans have debated how to manage our forests. Americans care deeply for the land; our conservation roots reach back to the literature of James Fenimore Cooper, to the philosophy of Henry David Thoreau, to the landscape paintings of the Hudson School.

Our passion for the land leaves many Americans with strong feelings about how best to use the land. Fueled by emotion, land use disputes can be long and intense. In recent decades, the result has been litigation, new information, injunctions—all prompting great, and often overdue, change—but not without social and economic disruption.

It's time to look beyond the disputes of the moment to ask what we want our forests to look like in 20 to 50 years. What do we want from America's forests? Can we find ways of moving beyond confrontation to envision together a better future for our forests?

First, let us take stock of our forests and how we got where we are today.

### America's Forest History

We live in a highly urbanized society. It's easy to forget the vital role that forests played in the history and development of our country. Wood was practically our only fuel for most of our history. It warmed our citizens, produced our iron, and powered our machines. Lumber, timber, and other wood products went into our houses, barns, fences, bridges, even our dams and locks. Everything depended on wood from America's forests—rural economies, industry, transportation, the building of cities. In a very real sense, the forests were the economic foundation of the Nation.

In a spiritual sense, too, the forest—and the wilderness values it represents—played a key role in shaping our identity as a Nation. Our Nation's forests inspired Thoreau, Emerson, John Muir, and many other great Americans. Our wildlands are uniquely American. Other cultures have their ancient architectures, their classical sculptures and literatures; we Americans have our wildlands. Our wildlands have shaped our character as a people. Our children regard woodsmen like Davy Crockett and Daniel Boone as our national heroes. Our political history has been shaped, more than for other nations, by the great conservation movements that arose to address concerns over wildlife decimation and forest depletion.

By 1900, "cut-and-run" forestry practices had demolished forests in the Appalachians, the Northeast, and the Great Lakes area. To protect the Nation's watersheds and timber reserves, Theodore Roosevelt laid the foundations for our National Forest System today. Management was

entrusted to the Forest Service under its first Chief, Gifford Pinchot. What made Pinchot's young Forest Service unique was a set of conservation values that were not necessarily popular but were always in the long-term interest of land health.

Following World War II, another set of values came to the fore—helping to fulfill the national dream of providing families with single-family homes, good and important values. Our timber harvests escalated for nearly a quarter of a century.

However, along the way, social values changed. As early as 1928, Aldo Leopold understood that timber could no longer drive national forest management. “Whether we like it or no,” he mused, “national forest policy is outgrowing the question of boards.” Today, Americans want more than timber from their national forests and grasslands. They want:

- *Pure, clean water.* More than 60 million Americans get their drinking water from watersheds that originate on our national forests and grasslands.
- *Recreation opportunities.* Fifty years ago, our national forests and grasslands hosted just 18 million visitor-days; last year, it was nearly 1 billion—50 times more!
- *Healthy fish and wildlife.* We provide 80 percent of the habitat in the lower 48 States for elk, mountain goat, and bighorn sheep. We maintain 28 million acres of wild turkey habitat and half of the country’s blue-ribbon trout streams. We have some of the best habitat nationwide for protecting America’s noblest symbols, our wolves, eagles, salmon, and grizzlies.
- *Wilderness values.* We protect some 35 million acres of wilderness, comprising about a third of the National Wilderness Preservation System. Today, more Americans than ever find solace in the solitude offered by our wilderness areas.
- *Biodiversity.* For many species, our national forests and grasslands are their final bastion—a last, best hope for refuge, especially on lands adjacent to other protected lands—our national parklands, national monuments, and wildlands managed by the Bureau of Land Management. Of the 327 watersheds identified by The Nature Conservancy as critical for the conservation of biodiversity in the United States, 181 are on our national forests and grasslands. So are 366 species of plants and animals listed as threatened or endangered under the Endangered Species Act, plus another 2,800 sensitive species.

What have we learned from the changing expectations of the people we serve, the owners of our public lands? We have learned that sustainable forest management cannot be defined solely or even primarily in terms of grazing and timberland. Sustainability today includes all the other values and services that Americans want and expect from their national forests and grasslands.

Through the work of Aldo Leopold and others who followed in his footsteps, we learned how better to manage the land to meet our goal of sustainable management. Today, we take a holistic approach—an ecosystem approach—to wildland management. We know that we must protect the health of our forest and grassland ecosystems. All the threads in the tapestry of life must be

strong and securely interwoven. High-quality water must flow freely; the soil must be abundant and stable; a full array of habitats and species must be present; and all the complicated ways that living organisms function and interact must be working together well.

If everything is working well, then we have a healthy ecosystem—an ecosystem that maintains its natural integrity, functions, and processes. Then and only then will the ecosystem be able to provide, in a sustainable way, the commodities and amenities that we as a society need and have come to expect from our national forests and grasslands.

### **America's Forests Today**

So do we have healthy forests today?

In many areas, especially on Federal lands, forest health is reasonably good. For this we can thank our predecessors—Roosevelt, Pinchot, Leopold, and all the others who showed the way. But the picture is not all rosy. In some areas, conditions in America's forests are poor and getting worse; so much worse that we even speak of a forest health crisis. Consider this:

- Wildland fragmentation continues to increase as woodlots and grasslands are subdivided and sold, with parcels developed for nonforest uses. Habitat is lost daily for species that shun human contact, such as wolves and grizzlies, and for forest interior species, including many neotropical songbirds.
- 58 million acres are at risk from insects and diseases, including 24 million acres on our national forests and 34 million acres on other lands.
- Many riparian areas nationwide continue to decline. Thirty-five percent of freshwater fish, 38 percent of amphibians, and 56 percent of freshwater mussels are imperiled or vulnerable.
- Introduced pests are devastating our wildland resources. More than 2,000 invasive and noxious plant species, 400 nonnative forest insects, 20 tree pathogens, and countless exotic aquatic species are already established in the United States. On public lands, the annual spread of invasive plant species exceeds the size of Delaware. The cost of invasive species to our economy is estimated at more than \$136 billion per year.

These are just some of the many problems facing our forests today. I'd like to discuss two of them in a little more detail.

The first problem has to do with levels of timber harvest. On our national forests, we've reduced timber harvest by more than two-thirds—from about 12 billion board feet in the late 1980's to some 3 to 4 billion board feet today. Make no mistake. Although we did what was expected of us at the time, we were cutting too many trees for too long. We've stopped that.

But have we really solved the problem? Demand for the 8 to 9 billion board feet formerly harvested from national forests did not disappear. It simply found other supplies. Consider:

- From 1965 to 1999, our annual paper consumption increased overall by 120 percent and per capita by 90 percent, from 468 to 750 pounds per person.
- The average size of homes in the United States grew from 1,520 square feet in 1971 to 2,120 square feet in 1996. Meanwhile, family sizes have grown smaller.
- Between 1991 and 1996, U.S. softwood imports from Canada rose from 11.5 to nearly 18 billion board feet per year. Old-growth boreal ecosystems have suffered in northern Quebec.

The Forest Service can't solve such problems alone. In the absence of a national consumption ethic, our land ethic only shifts our environmental problems to other lands where environmental protections are fewer.

Aldo Leopold's admonition is worth repeating: "A public which lives in wooden houses should be careful about throwing stones at lumbermen, even wasteful ones, until it has learned how its own arbitrary demands as to kinds and qualities of lumber help cause the waste which it decries." I challenge you to help us build a national consumption ethic to reduce the need for timber harvest. But until we do, I believe that we have a national obligation to help meet our own demand for wood fiber through sustainable timber harvest on our national forests—as long as the health of the land is not in any way compromised.

And that brings me to another problem that defies simple administrative solutions. Our forest ecosystems most in trouble are those where low-intensity fires once swept through the forest every few years. Since the 1800's, we thought that virtually all fire was bad for the land. By the 1940's, we finally had the means to put out almost every fire. Small trees and brush, no longer kept out by frequent low-intensity fires, built up in our forests.

These fuels are the biggest threat we face today in the interior West. When fires now occur, the dense fuels can make the fires so intense that they destroy entire forest stands. Some 24 million acres of national forests in the interior West are at high risk of wildland fires that could compromise ecosystem integrity and human safety. An additional 32 million acres are at moderate risk. That's 56 million acres at risk, or about 29 percent of the land in our National Forest System.

### **Collaborative Action**

So how do we restore our forests to health?

One thing is very clear: The Forest Service can't do it alone. Our problems are too vast—they cross jurisdictional boundaries. Our national forestlands hold only a small proportion of the Nation's forests—about 18 percent. Our proportion of acres burned is even smaller in most years; in 1999, it was about 11 percent.

Our forest health problems are not a Forest Service problem—not even a Federal lands problem. They are a national problem. That's why President Clinton called this year for a national

approach to address the problem of unnaturally severe wildland fires. On September 8, Secretaries Glickman and Babbitt delivered a report to President Clinton outlining steps to address the problem. Here are four steps endorsed by the President:

First, the President will continue to provide all the firefighting resources we need to protect lives, property, and natural resources. We have the finest wildland firefighting organization in the world; for every large fire in the headlines, 49 others never make the news because we put them out so fast. The key to our success has been nationwide cooperation. Wildland firefighting today involves many partners at multiple levels, from rural fire departments to Federal land managers. We will continue to provide everything our firefighters need at every level to do their job, both safely and well.

Second, we will restore our landscapes and rebuild our communities. We will help people in hard-hit rural communities to rebuild their homes, businesses, and neighborhoods. Wildland fires leave behind safety hazards and the potential for property damage and resource degradation through postfire flooding and erosion. We will use our interagency burned area rehabilitation teams to protect public health and safety, safeguard our natural and cultural resources, and restore environmentally sensitive areas.

Third, we will make long-term investments to reduce fire risk. Wildland fire knows no boundaries. We will collaborate across Federal, State, tribal, and local jurisdictions in planning and implementing fuels treatments, based on the best available science. Our highest priority will be the wildland/urban interface, where communities are most at risk. Our treatments will include prescribed fire and the removal of excess brush, small trees, and dead fuels.

Fourth, we will work directly with local communities to identify fuels treatment projects tailored to meet local needs. We will use local labor for fuels treatment and restoration work, and we will expand our financial and technical assistance to rural fire departments, our first line of defense. We will help local landowners make their homes and properties firesafe by clearing away enough fuels to create a survivable space.

### **A Vision in Common**

Our fire strategy is based on a collective, locally driven approach to solving our forest health problems. It builds on our history of success in collaborating at every level—Federal, State, and local—to form the most effective wildland firefighting organization in the world. It's worth remembering that 70 years ago, 52 million acres burned in a single fire season. So far this year, thanks to the skill and dedication of our wildland firefighters, less than 7 million acres have burned, despite terrible fuel and drought conditions.

For too long, we have allowed the extremes to define our agendas. Confrontation has bred suspicion; litigation has led to paralysis and inaction. But a new paradigm is emerging. It's happening in communities all across the Nation, where loggers and environmentalists, ranchers and anglers are growing weary of the controversy. They are sitting down in coffee shops or

leaning together against pickups and getting to know one another. They are learning that what divides them need not prevent them from working together to achieve the goals that unite them.

It's happening in places like Kalispell, Montana. That's where old adversaries decided to try something new. Defenders of Wildlife, the Montana Logging Association, the National Wildlife Federation, and the Intermountain Forest Industry Association all came together to form Flathead Common Ground. This collaborative group agreed to:

- Decommission 116 miles of old and unused roads to help grizzly bears.
- Restore many miles of stream.
- Burn 8,700 acres to improve deer and elk browse and regeneration for whitebark pine.
- Harvest timber and treat vegetation on 633 acres.

What are the goals that can bring people together? One of them is water. Everyone needs water. Everyone needs clean water and all the benefits that flow from it. Watersheds and streams are the lifeblood of our grasslands and forests. They are the barometers of the health of the land. By focusing on areas of agreement such as water quality improvement, maintaining streamflows, and allowing for the ecological processes that make our forests healthy, we can bring people together to restore the soil, water, and air upon which we and future generations will depend.

This Nation is founded on the premise that diverse groups, creeds, and races of people can come together in good will and resolve any challenge, no matter how daunting. I have a vision. I envision a time when our differences no longer divide us in managing the land. I envision a time when America's lands, like the ecosystems on them, are interwoven in a seamless tapestry, a tapestry of collective and collaborative management to protect the land while meeting the needs of people, within the limits of the land. I envision a time when everywhere you go in our country, you find healthy, vigorous forests that support multiple habitats for a rich variety of native species.

What will the role of the Forest Service be? Our greatest value to society in the future will be to develop and deliver good science on ecosystem management and watershed conservation—and to help people develop a shared vision for managing healthy watersheds. Our national forests and grasslands will serve as models of sustainable management while helping to meet our Nation's need for clean water, wood fiber, dispersed recreation, healthy fish and wildlife, solitary places for spiritual renewal, and all the other multiple uses that are every American's birthright.

It won't happen overnight. It might take 20 years, maybe 50 years, maybe 100. After all, it took a century or more to create the problems we face today.

One last time, Aldo Leopold: "Conservation, viewed in its entirety, is the slow and laborious unfolding of a new relationship between people and land." I would add, and a new relationship among the people who live and play on the land. I believe that practicing our land ethic—treating the land with respect—depends on first treating each other with respect. With your help,

it can happen. It will happen if we overlook our past differences and finally join together for the health of the land.

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These fuels are the biggest threat we face today in the interior West. When fires now occur, the dense fuels can make the fires so intense that they destroy entire forest stands. Some 24 million acres of national forests in the interior West are at high risk of wildland fires that could compromise ecosystem integrity and human safety. An additional 32 million acres are at moderate risk. That's 56 million acres at risk, or about 29 percent of the land in our National Forest System.

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By 1900, “cut-and-run” forestry practices had demolished forests in the Appalachians, the Northeast, and the Great Lakes area. To protect the Nation’s watersheds and timber reserves, Theodore Roosevelt laid the foundations for our National Forest System today. Management was entrusted to the Forest Service under its first Chief, Gifford Pinchot. What made Pinchot’s young Forest Service unique was a set of conservation values that were not necessarily popular but were always in the long-term interest of land health.

Following World War II, another set of values came to the fore—helping to fulfill the national dream of providing families with single-family homes, good and important values. Our timber harvests escalated for nearly a quarter of a century.

However, along the way, social values changed. As early as 1928, Aldo Leopold understood that timber could no longer drive national forest management. “Whether we like it or no,” he mused, “national forest policy is outgrowing the question of boards.” Today, Americans want more than timber from their national forests and grasslands. They want:

- *Pure, clean water.* More than 60 million Americans get their drinking water from watersheds that originate on our national forests and grasslands.
- *Recreation opportunities.* Fifty years ago, our national forests and grasslands hosted just 18 million visitor-days; last year, it was nearly 1 billion—50 times more!
- *Healthy fish and wildlife.* We provide 80 percent of the habitat in the lower 48 States for elk, mountain goat, and bighorn sheep. We maintain 28 million acres of wild turkey habitat and half of the country's blue-ribbon trout streams. We have some of the best habitat nationwide for protecting America's noblest symbols, our wolves, eagles, salmon, and grizzlies.
- *Wilderness values.* We protect some 35 million acres of wilderness, comprising about a third of the National Wilderness Preservation System.
- *Biodiversity.* For many species, our national forests and grasslands are their final bastion—a last, best hope for refuge. Of the 327 watersheds identified by The Nature Conservancy as critical for the conservation of biodiversity in the United States, 181 are on our national forests and grasslands. So are 366 species of plants and animals listed as threatened or endangered under the Endangered Species Act, plus another 2,800 sensitive species.

What have we learned from the changing expectations of the people we serve, the owners of our public lands? We have learned that sustainable forest management cannot be defined solely or even primarily in terms of grazing and timberland. Sustainability today includes all the other values and services that Americans want and expect from their national forests and grasslands.

Through the work of Aldo Leopold and others who followed in his footsteps, we learned how better to manage the land to meet our goal of sustainable management. Today, we take a holistic approach—an ecosystem approach—to wildland management. We know that we must protect the health of our forest and grassland ecosystems. All the threads in the tapestry of life must be strong and securely interwoven. High-quality water must flow freely; the soil must be abundant and stable; a full array of habitats and species must be present; and all the complicated ways that living organisms function and interact must be working together well.

If everything is working well, then we have a healthy ecosystem—an ecosystem that maintains its natural integrity, functions, and processes. Then and only then will the ecosystem be able to provide, in a sustainable way, the commodities and amenities that we as a society need and have come to expect from our national forests and grasslands.

## America's Forests Today

So do we have healthy forests today?

In many areas, especially on Federal lands, forest health is reasonably good. For this we can thank our predecessors—Roosevelt, Pinchot, Leopold, and all the others who showed the way. But the picture is not all rosy. In some areas, conditions in America's forests are poor and getting worse; so much worse that we even speak of a forest health crisis. Consider this:

- Forest fragmentation continues to increase as woodlots are subdivided and sold, with parcels developed for nonforest uses. Habitat is lost daily for species that shun human contact, such as wolves and grizzlies, and for forest interior species, including many neotropical songbirds.
- 58 million acres are at risk from ~~the~~ insects and diseases, including 24 million acres on our national forests and 34 million acres on other lands.

- Many riparian areas nationwide continue to decline. Thirty-five percent of freshwater fish, 38 percent of amphibians, and 56 percent of freshwater mussels are imperiled or vulnerable.
- Introduced pests are devastating our wildland resources. More than 2,000 invasive and noxious plant species, 400 nonnative forest insects, 20 tree pathogens, and countless exotic aquatic species are already established in the United States. On public lands, the annual spread of invasive plant species exceeds the size of Delaware. The cost of invasive species to our economy is estimated at more than \$136 billion per year.

These are just some of the many problems facing our forests today. I'd like to discuss two of them in a little more detail.

The first problem has to do with levels of timber harvest. On our national forests, we've reduced timber harvest by more than two-thirds—from about 12 billion board feet in the late 1980's to some 3 to 4 billion board feet today. Make no mistake. Although we did what was expected of us at the time, we were cutting too many trees for too long. We've stopped that.

But have we really solved the problem? Demand for the 8 to 9 billion board feet formerly harvested from national forests did not disappear. It simply found other supplies. Consider:

- From 1965 to 1999, our annual paper consumption increased overall by 120 percent and per capita by 90 percent, from 468 to 750 pounds per person.
- The average size of homes in the United States grew from 1,520 square feet in 1971 to 2,120 square feet in 1996. Meanwhile, family sizes have grown smaller.
- Between 1991 and 1996, U.S. softwood imports from Canada rose from 11.5 to nearly 18 billion board feet per year. Old-growth boreal ecosystems have suffered in northern Quebec.

The Forest Service can't solve such problems alone. In the absence of a national consumption ethic, our land ethic only shifts our environmental problems to other lands where environmental protections are fewer.

Aldo Leopold's admonition is worth repeating: "A public which lives in wooden houses should be careful about throwing stones at lumbermen, even wasteful ones,

until it has learned how its own arbitrary demands as to kinds and qualities of lumber help cause the waste which it decries." I challenge you to help us build a national consumption ethic to reduce the need for timber harvest. But until we do, I believe that we have a national obligation to help meet our own demand for wood fiber through sustainable timber harvest on our national forests—as long as the health of the land is not in any way compromised.

And that brings me to another problem that defies simple administrative solutions.

Our forest ecosystems most in trouble are those where low-intensity fires once swept through the forest every few years. Originally, we thought that virtually all fire was bad for the land. By the 1940's, we finally had the means to put out almost every fire. Small trees and brush, no longer kept out by frequent low-intensity fires, built up in our forests.

These fuels are the biggest threat we face today in the interior West. When fires now occur, the dense fuels can make the fires so intense that they destroy entire forest stands. Some 24 million acres of national forests in the interior West are at high risk of wildland fires that could compromise ecosystem integrity and human safety. An additional 32 million acres are at moderate risk. That's 56 million acres at risk, or about 29 percent of the land in our National Forest System.

## **Collaborative Action**

So how do we restore our forests to health?

One thing is very clear: The Forest Service can't do it alone. Our problems are too vast—they cross jurisdictional boundaries. Our national forestlands hold only a small proportion of the Nation's forests—about 18 percent. Our proportion of acres burned is even smaller in most years; in 1999, it was about 11 percent.

Our forest health problems are not a Forest Service problem—not even a Federal lands problem. They are a national problem. That's why President Clinton called this year for a national approach to address the problem of unnaturally severe wildland fires. On September 8, Secretaries Glickman and Babbitt delivered a report to President Clinton outlining steps to address the problem. Here are four steps endorsed by the President:

First, the President will continue to provide all the firefighting resources we need to protect lives, property, and natural resources. We have the finest wildland firefighting organization in the world; for every large fire in the headlines, 49 others

never make the news because we put them out so fast. The key to our success has been nationwide cooperation. Wildland firefighting today involves many partners at multiple levels, from rural fire departments to Federal land managers. We will continue to provide everything our firefighters need at every level to do their job, both safely and well.

Second, we will restore our landscapes and rebuild our communities. We will help people in hard-hit rural communities to rebuild their homes, businesses, and neighborhoods. Wildland fires leave behind safety hazards and the potential for property damage and resource degradation through postfire flooding and erosion.

We will use our interagency burned area rehabilitation teams to protect public health and safety, safeguard our natural and cultural resources, and restore environmentally sensitive areas.

Third, we will make long-term investments to reduce fire risk. Wildland fire knows no boundaries. We will collaborate across Federal, State, tribal, and local jurisdictions in planning and implementing fuels treatments, based on the best available science. Our highest priority will be the wildland/urban interface, where communities are most at risk. Our treatments will include prescribed fire and the removal of excess brush, small trees, and dead fuels.

Fourth, we will work directly with local communities to identify fuels treatment projects tailored to meet local needs. We will use local labor for fuels treatment and restoration work, and we will expand our financial and technical assistance to rural fire departments, our first line of defense. We will help local landowners make their homes and properties firesafe by clearing away enough fuels to create a survivable space.

### **A Vision in Common**

Our fire strategy is based on a collective, locally driven approach to solving our forest health problems. It builds on our history of success in collaborating at every level—Federal, State, and local—to form the most effective wildland firefighting organization in the world. It's worth remembering that 70 years ago, 52 million acres burned in a single fire season. So far this year, thanks to the skill and dedication of our wildland firefighters, less than 7 million acres have burned, despite terrible fuel and drought conditions.

For too long, we have allowed the extremes to define our agendas. Confrontation has bred suspicion; litigation has led to paralysis and inaction. But a new paradigm

is emerging. It's happening in communities all across the Nation, where loggers and environmentalists, ranchers and anglers are growing weary of the controversy. They are sitting down in coffee shops or leaning together against pickups and getting to know one another. They are learning that what divides them need not prevent them from working together to achieve the goals that unite them.

*Watahah Reletti  
Models that  
worked.*

It's happening in places like Kalispell, Montana. That's where old adversaries decided to try something new. Defenders of Wildlife, the Montana Logging Association, the National Wildlife Federation, and the Intermountain Forest Industry Association all came together to form Flathead Common Ground. This collaborative group agreed to:

- Decommission 116 miles of old and unused roads to help grizzly bears.
- Restore many miles of stream.
- Burn 8,700 acres to improve deer and elk browse and regeneration for whitebark pine.
- Harvest timber and treat vegetation on 633 acres.

What are the goals that can bring people together? One of them is water. Everyone needs water. Everyone needs clean water and all the benefits that flow from it.

Watersheds and streams are the lifeblood of our grasslands and forests. They are the barometers of the health of the land. By focusing on areas of agreement such as water quality improvement, maintaining streamflows, and allowing for the ecological processes that make our forests healthy, we can bring people together to restore the soil, water, and air upon which we and future generations will depend.

This Nation is founded on the premise that diverse groups, creeds, and races of people can come together in good will and resolve any challenge, no matter how daunting. I have a vision. I envision a time when our differences no longer divide us in managing the land. I envision a time when America's lands, like the ecosystems on them, are interwoven in a seamless tapestry, a tapestry of collective and collaborative management to protect the land while meeting the needs of people. I envision a time when everywhere you go in our country, you find healthy, vigorous forests that support multiple habitats for a rich variety of native species.

*within the limits  
of the land*

What will the role of the Forest Service be? Our greatest value to society in the future will be to develop and deliver good science on ecosystem management and watershed conservation—and to help people develop a shared vision for managing

healthy watersheds. Our national forests and grasslands will serve as models of sustainable management while helping to meet our Nation's need for clean water, wood fiber, dispersed recreation, healthy fish and wildlife, solitary places for spiritual renewal, and all the other multiple uses that are every American's birthright.

It won't happen overnight. It might take 20 years, maybe 50 years, maybe 100.

After all, it took a century or more to create the problems we face today.

One last time, Aldo Leopold: "Conservation, viewed in its entirety, is the slow and laborious unfolding of a new relationship between people and land." I would add, and a new relationship among the people who live and play on the land. I believe that practicing our land ethic—treating the land with respect—depends on first treating each other with respect. With your help, it can happen. It will happen if we overlook our past differences and finally join together for the health of the land.

*Let's look at some other models -  
Gates, Jobs  
what can we learn from history*

# **BIOGRAPHICAL INFORMATION**

## **Roundtable Panelists**

### **Theodore Roosevelt Birthplace NHS**

**September 19, 2000**

**Co-conveners: Theodore Roosevelt, IV and William J. vanden Heuvel**

#### **Ken Barrett, ORION – The Hunter's Institute, Helena, Montana**

Mr. Barrett's career includes work with the New York State Outdoor Education Center, Hudson Riverkeeper Fund, and the Greater Yellowstone Coalition. He is co-founder of The Hunter's Institute. The last twenty years have been devoted to strategic planning and implementation, and raising money for business ventures and nonprofit organizations. He is an amateur big game and bird hunter, dog trainer, fly fisherman, archer, skier, gourmet chef and occasional writer.

#### **Rick Bass, Writer, Yaak Valley Forest Council, Montana**

Mr. Bass lives in Northwest Montana's Kootenai National Forest, in the Yaak Valley, where there is still not a single acre of designated wilderness. He is the author of 16 books of fiction and nonfiction, including a novel, Where the Sea Used to Be, and an essay collection, The Book of the Year.

#### **Frances Beinecke, National Resource Defense Council, New York**

One of the nation's leading environmental organizations, NRDC uses the law and science to advance environmental protection in the U.S. and abroad. Ms. Beinecke has been involved with NRDC since 1973 as an intern, then as a resource specialist in the coastal/marine program, and currently as executive director. She sits on many boards, including the World Resources Institute, and in the past served as board chairperson for The Wilderness Society and the Adirondack Council.

#### **Christopher Camuto, Writer, Virginia**

Mr. Camuto is the author of three works of nonfiction about the Southern Appalachians. The titles are: A Fly Fisherman's Blue Ridge; Another Country: Journeying Toward the Cherokee Mountains; and Hunting From Home. He is a columnist for Audubon, 6 Days Sporting Journal and Trout, and is currently Visiting Writer-In-Residence at Washington and Lee University.

### **Dr. Michael Dombeck, Chief, USDA Forest Service, Washington, DC**

Dr. Dombeck grew up in Wisconsin near the Chequamegon National Forest where he served 11 summers as a fishing guide. He received his doctorate in fisheries biology and taught biology, chemistry, science, zoology and fisheries management. Twelve years were spent with the Forest Service as National Fisheries Program Manager where he was recognized for outstanding leadership and forging partnerships. Dr. Dombeck spent a year as Legislative Fellow in the U.S. Senate with responsibility for natural resources and interior appropriations issues. In 1994 he was named acting director of the Bureau of Land Management and appointed Chief of the Forest Service in 1997. As Forest Service Chief he has focused on creating a long-term vision for improving the health of the land and improving customer service through collaborative stewardship.

### **Thomas Elliott, N-Bar Land and Cattle Company, Montana**

Mr. Elliott is the former owner and manager of the historic 48,000 acre N-Bar Ranch in Montana. He is known for his award-winning stewardship practices and leadership in the sustainable agriculture movement. His ranching organization is one of the largest producers of Angus bulls, semen, and beneficial flea beetles in the nation. Among other board positions, Mr. Elliott currently serves as president of the Montana Community Foundation. He is particularly interested in rural economic development, whole systems design and chaos theory.

### **David Foreman, Publisher, Wild Earth, Vermont**

Mr. Foreman volunteered with The Nature Conservancy, the Sierra Club and the New Mexico Wilderness Study Committee before becoming Southeast Regional Representative for The Wilderness Society in the early 1970s, and was their chief lobbyist. He was associated with Earth First! for ten years and was the co-founder. He currently publishes Wild Earth! and chairs the Wildlands Project, which works to design and implement systems of protected natural areas - wildlands networks - across North America.

### **Maggie Fox, Sierra Club, Colorado**

### **Stan and Mary Flitner, Ranchers, Wyoming**

Along with their family, Stan and Mary Flitner own and operate the Diamond Tail Ranch, which is in its fifth generation utilizing federal, state and private lands. The ranch has received recognition for conservation, stewardship, and range management. During his tenure as president of the Wyoming Stockgrowers Association, Stan initiated a positive relationship between the environmental community and the National Cattlemen's Organization, which continues as the "Open Spaces Dialogue." Among the agricultural organizations and conservation groups participating are The Nature Conservancy, Greater Yellowstone Coalition, and others. Mary is a board member for the Institute for the Environment and Natural Resources at the University of Wyoming. She previously served as Chairperson of Wyoming's wildlife

agency, the Wyoming Game and Fish Commission. During her tenure the Commission directed a task force called "Public Wildlife – Private Lands" seeking agreements with sportsmen, private landowners and agency managers in Wyoming.

**Thomas Fry, Director, Bureau of Land Management, U.S. Department of the Interior, Washington, DC**

Prior to his appointment by President Clinton as BLM director, Mr. Fry was deputy director and chief of staff for the Interior deputy director previous to the BLM appointment. He has also served as director of the Minerals Management Service, vice president of the Dallas Natural Gas Processing and Transmission Company, regional counsel for the U.S. Department of Energy in Dallas, and assistant attorney general for the State of Texas where he was assistant chief of the Texas Anti-Trust Consumer Protection program.

**Paul W. Hansen, The Izaak Walton League of America, Maryland**

Mr. Hansen is executive director of IWLA, one of the nation's oldest and most respected conservation organizations. For more than 75 years the proudly pro-hunting and fishing IWLA has occupied the "sensible center" of U.S. conservation advocacy. The League works closely with the nation's environmental groups, sports groups, and the business community to find solutions that work. Mr. Hansen is an avid outdoorsman, hunter, fly fisherman, and gardener, who also plays hockey, tennis and golf.

**Henry L. Henderson, Policy Solutions Ltd., Illinois**

Mr. Henderson is President of Policy Solutions, a consulting firm which specializes in environmental, economic and cultural analysis and programming. Current projects include Great Lakes water quality and quantity issues, evaluation of the economic value of open space, and other environmental and ecological amenities; policy analysis of electric utility restructuring; and development of innovative regional approaches to clean air. Mr. Henderson chairs the Chicago Environmental Fund which supports rehabilitation of critical ecosystems and habitats in the urban environment. He served as Commissioner of the Environment for the City of Chicago and began the Brownfield Initiative, over-seeing the city's energy policy, enforcement and urban ecosystem restoration. Previously he was assistant attorney general for the State of Illinois, with responsibility for natural resource litigation, prosecution of nuclear waste and hazardous materials crimes and violations. He currently teaches environmental law and policy for the University of Chicago.

**Daniel Kemmis, Center for the Rocky Mountain West, University of Montana**

Mr. Kemmis is the Director of the O'Connor Center for the Rocky Mountain West. He is the former mayor of Missoula, former speaker and minority leader of the Montana House of Representatives, and four-term Montana legislator. He is the author of Community and the Politics of Place and The Good City and the Good Life. In 1977 he received the Society of Conservation Biology's Distinguished Achievement Award for social, economic and political

work and in 1998 The Center of the American West awarded him the Wallace Stegner Prize for sustained contribution to the cultural identity of the West. In February 2000, he was honored as Pinchot Distinguished Lecturer in Washington DC.

### **Roger Kennedy, New Mexico**

Mr. Kennedy is an historian and the former director of the National Park Service. He is also Director Emeritus of the Smithsonian's National Museum of American History. Previous to his tenure at the museum, he was vice president of the Ford Foundation and has served six United States presidents on various boards and commissions, including a special assistant position to the U.S. Attorney General and the Secretary of Health, Education and Welfare. He has worked in broadcasting as presenter and producer, has covered the White House for NBC, and hosted his own radio program. Mr. Kennedy also has appeared in many documentary programs for PBS. He is founding chairman of the Guthrie Theatre and the Library of America. His books include Minnesota Houses, Figures on a Moving Frontier, American Churches, Architecture, Men, Women and Money, Order From France, Rediscovering America, Mission, Hidden Cities, and Burr, Hamilton and Jefferson.

### **William H. Meadows, The Wilderness Society, Washington, DC**

Mr. Meadows assumed the presidency of The Wilderness Society in 1996 and has attempted to build organizational strengths of research, public education and advocacy. In an attempt to add 200 million acres to the national wilderness preservation system, the Society has focused on specific places, building the case, doing the research, telling the stories, and developing partnerships with local and regional organizations. They have also attempted to work positively and proactively with federal land management agencies and with the Congress to see that our vision of conservation guides decision-making in the 21<sup>st</sup> Century.

### **Robert Munson, Theodore Roosevelt Conservation Alliance, Montana**

Mr. Munson grew up in Chicago, but developed a love for the West while attending the University of Montana. He returned to Illinois after a tour in Vietnam, working in the construction business. Returning to Montana, he founded the Rocky Mountain Elk Foundation in 1984 where he served as President and CEO and then President Emeritus. In 1999 he became the director of the Theodore Roosevelt Conservation Alliance.

### **Roger Rivera, National Hispanic Environmental Council, Virginia**

Mr. Rivera is president of Roger Rivera & Associates which provides advocacy, public affairs, fundraising and strategic communications in Washington, DC. He served as Director of Community Affairs for La Raza, a leading Hispanic rights organization and has been very politically active in the last four presidential races. He is the founder of the National Hispanic Environmental Council, a membership organization of 3,000 devoted to education, unity and the engagement of Hispanics on issues of the environment and sustainable development. The group provides a voice for the Hispanic community at all levels of government and to nonprofit

decision-makers. At the same time it provides careers in business, education and policy in the areas of environment and conservation. Currently Mr. Rivera serves on the U.S. Forest Service's National Urban and Community Forest Council, and was recently nominated to serve on the EPA's National Environmental Justice Advisory Council.

### **Christopher duPont Roosevelt, Esq., New York**

Mr. Roosevelt practices law in New York and is the volunteer president of the Bermuda Biological Station for Research, Inc., a New York not-for-profit oceanographic and global science education and research organization. He is a member of the Marine Programs Advisory Council of the University of Rhode Island; and vice chairman of the Mianus Gorge Preserve of The Nature Conservancy. He currently chairs the Roosevelt Campobello International Park Commission in New Brunswick, Canada. In the past he has developed the Oceanic Society and published *Oceans Magazine*. He continues as a trustee of the Maritime Aquarium in Norwalk, Connecticut.

### **Rodger Schlickeisen, Defenders of Wildlife, Washington, DC**

Mr. Schlickeisen has been President of the Defenders of Wildlife since September 1991. Formerly he served as chief of staff to Senator Max Baucus (D-MI); CEO of Craver, Matthews, Smith & Company; associate director of the U.S. Office of Management & Budget; and organizer and chair of Virginia Common Cause. He is a board member of the National Resources Council of America, League of Conservation Voters (where he chairs the political committee) and also chairs the board of the Partnership Project.

### **Karin Sheldon, Environment Law Center, Vermont Law School**

Ms. Sheldon's principal interest has always been the protection of wild places and wild things, particularly in the West. She is fascinated by the history of the West and pained by the legacy of what Charles Wilkinson has called "the lords of yesterday," the mining law of 1872, the grazing and timber laws, and the prior appropriation doctrine of water law. She has tried to speak for land and natural resources protection in the courtroom, the Congress, and federal land management agencies. Now, from her New England outpost, she endeavors to pass on some of the things she has learned to the next generation of environmental lawyers.

### **Steven Shimberg, National Wildlife Federation, Washington, DC**

Mr. Shimberg is Vice President for Federal and International Affairs for the NWF and was previously staff director and chief counsel of the U.S. Senate Committee on Environment and Public Works, where he was involved with major environmental legislative issues. Working in the international treaty area, he was involved with sessions that led to the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer and the 1992 U.N. Conference on Environment and Development. Prior to working in the legislative branch, he was a prosecutor for the Wildlife Section of the Land and Natural Resources Division of the U.S. Department of Justice.

**Robert Stanton, Chief, National Park Service, U.S. Department of the Interior,  
Washington, DC**

**Jack Ward Thomas, Boone and Crockett Professor of Wildlife Conservation,  
Montana**

Mr. Thomas' program trains PhDs to work in the area of interfacing ecology, economics and political/social science, and law. Mr. Thomas spent 10 years with the Texas Parks and Wildlife Department and 30 years with the U.S. Forest Service, three of them as Chief.

**Johanna Wald, Director, Land Program, National Resource Defense Council, New York**

Ms Wald is a long-time public lands activist. Currently with Cathy Carlson of NWP, she is completing a comprehensive review of the Bureau of Land Management's implementation of Rangeland Reform of 1994 and developing a new agenda for the agency for the 21<sup>st</sup> Century. She is also deeply involved in organizing and planning activities for the Yosemite National Park and the Presidio.

**Susan Zakin, Author, Arizona**

As an environmental writer, Ms. Zakin thinks of herself as a bracero in the land of hunting and fishing magazines. Formerly she was a columnist for *Sports Afield* and a frequent contributor to *Field and Stream*. She is the author of *Coyotes and Town Dogs: Earth First!* and the *Environmental Movement*. Someone said this book is written as if Hunter S. Thompson took Tom Wolfe on a camping trip and convinced him to get his white suit dirty.

## **GUESTS**

**John Carlin**, Director of Development, Franklin & Eleanor Roosevelt Institute

**Joan Chevalier**, writer

**Dr. John A. Gable**, Executive Director, Theodore Roosevelt Association

**Anna Carlson Gannett**, Development Chairperson, Theodore Roosevelt Association

**Karen S. Perlman, CFRE**, National Development Director, Theodore Roosevelt Association

**Anne Roosevelt**, President, Franklin and Eleanor Roosevelt Institute

**Connie Roosevelt**, editor and writer

**David Woolner**, Executive Director, Franklin and Eleanor Roosevelt Institute

## A Fiery Start for Our New Recreation Agenda

Chief Mike Dombeck, USDA Forest Service  
Recreation Agenda Rollout  
Redding, CA—September 22, 2000

I am delighted to be here today to discuss recreation on our national forests and grasslands. But first, I'd like to say a few words about an issue on many people's minds: the severity of this fire season.

### Our Fire Strategy

This year, almost 7 million acres have burned so far. On average during the preceding decade, only 3.6 million acres burned during the entire fire season.

Dozens of large fires have burned across the West. Many areas were closed for public protection; campgrounds were shut down and reservations canceled. Campers, hikers, anglers, hunters, and other recreationists couldn't reach their favorite outdoor spots. Outfitters, guides, and others in the outdoor recreation industry lost business; local economies suffered. Postfire hazards, such as rolling logs and rocks, will raise safety issues for years to come.

almost  
80,000  
fires  
Best fire  
fighters  
in the  
World.

Why has this fire season been so severe? Weather is certainly a factor. But perhaps our biggest problem is fuels—the brush and small trees that have built up in many

of our western forests. Decades ago, when we began putting out every fire, fuels started building up in our forests. Today, the dense fuels can make the fires so intense that they destroy entire forest stands. Some 56 million acres of national forests in the interior West are at high or moderate risk of wildland fires that could compromise ecosystem integrity and human safety.

What's the solution? On September 8, Secretaries Glickman and Babbitt delivered a report to President Clinton. Here are four steps endorsed by the President:

1. First, we will continue to provide all the firefighting resources needed to protect lives, property, and natural resources for the rest of this fire season.
2. Second, we will help people in hard-hit rural communities to rebuild their homes, businesses, and neighborhoods and to rehabilitate fire-ravaged landscapes before they are further damaged by postfire floods and erosion.
3. Third, we will make long-term investments to reduce fire risk and restore healthy, diverse, and resilient ecosystems. Based on the best available science, our treatments will include prescribed fire and the removal of excess brush, small trees, and dead fuels.

4. Fourth, we will work directly with local communities to tailor our fuels treatments to local needs and to help individuals make their homes and properties firesafe.

*Firewise*

*Individuals  
Protect their homes*

Working together, we can and will solve America's long-term fuels problem. In the process, we will make our lands healthier and our communities better places to live and work.

## Our Recreation Agenda

Now it's my pleasure to make a few remarks on the future of recreation on our public lands. Our new Recreation Agenda is based on a single objective: to connect the American people to their national forests and grasslands in a way that conserves the long-term health of the land.

In recent decades, the number of visitors to our national forestlands has soared. In 1946, our national forests and grasslands hosted just 18 million visitor-days; last year, it was nearly 50 times more. *Increasing* Rising numbers of visitors mean unprecedented challenges for the Forest Service in meeting visitor expectations for enjoyable access to a wide variety of recreational activities. Our primary obligation is to

make sure that growing recreational use in no way compromises public safety or the health of the land.

To meet the challenge, we drafted a strategy based on a series of public meetings around the country. People came from all over—ordinary folks who cherish their public lands, along with folks from environmental groups and the recreation industry. We invited everyone to comment in writing, if they wished—and many did. Today, we are unveiling the results of their input, their participation, their feedback: our new Recreation Agenda.

Our agenda will guide Forest Service recreation programs into the 21st century. It will help us live within the limits of the land while increasing visitor satisfaction and fostering a new understanding of our public lands. Partnership is key: We will prioritize projects based on feedback from our partners and local communities, in accordance with sound science. We will leverage funding for new projects through grants, our partners and volunteers, and our Fee Demonstration Program. Already, we have collected \$80 million in recreation use fees, to be reinvested in our public lands, facilities, and services for the benefit of our visitors. We will focus on our core competency—offering outstanding natural settings for dispersed recreation.

We will also improve our customer service, expand our conservation education and interpretation, and build community relationships and partnerships.

Now I'd like to introduce Denny Bschor. Denny is the Forest Service's Director of Recreation, Heritage, and Wilderness Resources. He will describe our new Recreation Agenda in more detail.

## Our Public Lands Legacy

Chief Mike Dombeck, USDA Forest Service  
Public Lands Day  
Redding, CA—September 23, 2000

I am delighted to be here with you today to celebrate Public Lands Day. The noted historian Donald Jackson once said, “The public lands have always been the arena where Americans fought for their dreams.” The dream of land for the landless, of a farm or ranch for the homeless, drew millions of settlers to our vast public domain.

The dream of wealth also drew greedy and unscrupulous people who exploited our national generosity. Gifford Pinchot described the situation at the turn of the 20th century: “At a time when, in the West, the penalty for stealing a horse was death—death without the benefit of law—stealing the public land in open defiance of law was generally regarded with tolerance or even with approval. It cast no shadow on the reputation of the thief.” That had to change. Men like Theodore Roosevelt, Gifford Pinchot, and John Muir fought to protect our remaining public lands as a legacy for our children.

Today, under the stewardship of the Forest Service and our sister land management agencies, our public lands are safe from the worst depredations of humanity. But

we still face serious threats, often the unintended consequences of our own past actions.

That brings me to one of our greatest threats here in the West—wildland fire. It's an issue on many people's minds, so I'd like to say a few words about the severity of this fire season.

This year, almost 7 million acres have burned so far. On average during the preceding decade, only 3.6 million acres burned during the entire fire season. Why has this fire season been so severe? Weather is certainly a factor. But perhaps our biggest problem is fuels—the brush and small trees that have built up in many of our western forests.

Decades ago, when we began putting out every fire, fuels started building up in our forests. Today, the dense fuels can make the fires so intense that they destroy entire forest stands. Some 56 million acres of national forests in the interior West are at high or moderate risk of wildland fires that could compromise ecosystem integrity and human safety.

What's the solution? On September 8, Secretaries Glickman and Babbitt delivered a report to President Clinton. Here are four steps endorsed by the President:

1. First, we will continue to provide all the firefighting resources needed to protect lives, property, and wildland resources.
2. Second, we will help people in hard-hit rural communities to rebuild their homes, businesses, and neighborhoods and to rehabilitate fire-ravaged landscapes before they are further damaged by postfire floods and erosion.
3. Third, we will make long-term investments to reduce fire risk and restore healthy, diverse, and resilient ecosystems. Based on the best available science, our treatments will include prescribed fire and the removal of excess brush, small trees, and dead fuels.
4. Fourth, we will work directly with local communities to tailor our fuels treatments to local needs and to help individuals make their homes and properties firesafe.

Working together, we can and will solve America's long-term fuels problem. In the process, we will make our lands healthier and our communities better places to live and work. Making our lands healthier, our futures brighter has always been at the core of our mission as stewards of the public lands.

We can be proud of what we've accomplished, standing on the shoulders of Theodore Roosevelt, Gifford Pinchot, and all the others who showed the way. Donald Jackson makes a fitting tribute to their success in conserving the public lands: "After a century and a half of carelessness and conflict, the land still retains its capacity to inspire and to console. It is a kind of drawing account for the spirit."

That drawing account is not ours alone. In a sense, we are merely its custodians.

We must never forget that everything we do on our public lands will have consequences for generations to come. Let's make those consequences good, for the health of the land.

*Charles*

*We are not getting  
older, just better*

## Trails to the Future

Chief Mike Dombeck, USDA Forest Service  
National Trails Symposium—Trails Panel  
Redding, CA—September 23, 2000

I am delighted to be here today at the Trails Symposium. Before I begin my remarks, I'd like to say a few words about an issue on many people's minds: the severity of this fire season.

This year, almost 7 million acres have burned so far. On average during the preceding decade, only 3.6 million acres burned during the entire fire season. Why has this fire season been relatively severe? Weather is certainly a factor. But perhaps our biggest problem is fuels—the brush and small trees that have built up in many of our western forests.

Decades ago, when we began putting out every fire, fuels started building up in our forests. Today, the dense fuels can make the fires so intense that they destroy entire forest stands. Some 56 million acres of national forests in the interior West are at high or moderate risk of wildland fires that could compromise ecosystem integrity and human safety.

What's the solution? On September 8, Secretaries Glickman and Babbitt delivered a report to President Clinton. Here are four steps endorsed by the President:

*Burned areas emergency rehabilitation plan*

1. First, we will continue to provide all the firefighting resources needed to protect lives, property, and natural resources for the rest of this fire season.

*rehab. trails  
cultural sites  
Butterfoot NF  
250 miles  
trail impacts  
by fire*

2. Second, we will help people in hard-hit rural communities to rebuild their homes, businesses, and neighborhoods and to rehabilitate fire-ravaged landscapes before they are further damaged by postfire floods and erosion.

3. Third, we will make long-term investments to reduce fire risk and restore healthy, diverse, and resilient ecosystems. Based on the best available science, our treatments will include prescribed fire and the removal of excess brush, small trees, and dead fuels,

4. Fourth, we will work directly with local communities to tailor our fuels treatments to local needs and to help individuals make their homes and properties firesafe.

*Firewise*

Working together, we can and will solve America's long-term fuels problem. In the process, we will make our lands healthier and our communities better places to live and work.

Now let me return to the reason we are here today, to discuss our national trails system. The writer Joseph Wood Krutch once penned something that will resonate, I think, with everyone here: “Not to have known— as most men have not—either the mountain or the desert is not to have known one’s self.”

the mountain or the desert is not to have known one's self.

The mountain. The desert. How do we truly get to know either? Through a car window? Certainly not, only by following a trail.

By following a trail—that's how the **First Peoples**, the American Indians, traveled both near and far. **John Smith**, one of the first European explorers of what would become the United States, never ventured far from his ship except on trails shown to him by his American Indian guides. **Daniel Boone** blazed the Wilderness Trail across the Alleghenies on an old bison path. Without the Lolo Trail and American Indian guides to show the way, **Lewis and Clark** never would have made their historic journey across the Bitterroot Mountains. The Santa Fe Trail, the Oregon Trail—trails are the key to our past, to our destiny as Americans. An American who has never used a trail to explore a mountain, a desert, is truly missing a part of what it means to be American.

Other cultures have their great pyramids, their temples, their art. The wild places, ~~is the~~ <sup>is the</sup> frontier is the force that shaped the American character. The public land the remainder of the 1.8 billion acres of Public Domain. <sup>3</sup> Trail, garden of Heitz

And that's why we're here today. We're here to help more Americans discover themselves, discover their heritage, by using the trails on their public lands. We're here to discuss how we can use our trails to open a window to the natural world for the enjoyment and appreciation of an increasingly urban society.

Our 192 million acres of national forests and grasslands offer a unique niche of nature-based, dispersed recreation. Americans can use our 133,087 miles of hiking, horse, and OHV trails to enjoy undeveloped settings <sup>in wild places.</sup> That includes all or part of 6 out of 8 of America's National Scenic Trails and 11 out of 12 of our National Historic Trails.

Let me give you just one example, one that shows how trails connect us to our natural and cultural heritage. The Pacific Crest Trail is a jewel in the crown of America's scenic trails. It spans 2,650 miles from Mexico to Canada, mostly on national forestland. It reveals the beauty of the desert in southern California; the magic of forests and meadows in the Sierras; and the grandeur of volcanic peaks and glaciers in the Cascades. The trail passes through historic mining country, taking travelers past trailside evidence of our endless quest for natural resources. Thousands of visitors, on foot and on horseback, enjoy this national treasure each year.

How can we use our trails system to enlarge the window to our special places and experiences? How can we open the window even wider to more Americans from diverse backgrounds? These are the challenges we face in the 21st century. Here's some of what we're doing:

- Through our new Recreation Agenda, we will focus on serving a diverse trails community for persons of all abilities. There's nothing like the smile on the face of a child who first sees a high-mountain lake from her wheelchair on one of our special-access trails.
- We are collaborating with many of your trails groups in a National Trails Training Partnership for better trails management. I'll tell you, I've gotten lost on some of our wilderness trails, and that's fine—that's part of the wilderness experience. But ~~I will not tolerate~~ <sup>*we should not*</sup> deeply rutted, abused trails in our fragile backcountry ecosystems. With your help, we are working to prevent abuse and restore damaged trails.
- To help improve our trails, we are conducting surveys on their condition while exploring the use of information technology for completing trail logs. We are already using information technology to improve our trails inventory and our cost accounting for trails management.

- We are hiring new trails managers for the Continental Divide and Pacific Crest National Scenic Trails and a new trails administrator for the Nez Perce National Historic Trail.

Our partnerships are key. We are working with groups and individuals nationwide at every level to improve our trails and services. Now, I don't want to leave anybody out, so I won't try to list all our partners and everything they do—we could be here all day. Let me just say that without our volunteers—without our host here today, American Trails, and all the other trails associations and organizations we work with—our trails system as it exists today would not be possible. Here's just some of what you do:

- Through your Websites and other media, you provide information on trail accessibility for people of all abilities.
- Your programs help us maintain and administer *our* trails, often with very little Forest Service assistance.
- You help educate and train our trail users, including users of motorized and mechanized vehicles, in safe, responsible, and environmentally benign trail use.

What more can you do? Stay involved at the local level. Be willing to share the trail. Be an advocate for trails and the benefits they provide. And remember, volunteering need not always mean back-breaking labor. It can mean leading walks—a great way to introduce young people to the outdoors. It can mean providing public information on trails. It can mean helping us find funding for future projects. And, yes—it can mean manual labor; I can't tell you enough how much we welcome your hard-working volunteer maintenance teams.

Our national trails system must be based on a single objective: to connect the American people to their wildland heritage in a way that conserves the long-term health of the land. We must do everything we can to help Americans enjoy their trails—and nothing to compromise the health of the land.

## *Dombeck* *Cal Jerome on the* **An Enduring Partnership**

Chief Mike Dombeck, USDA Forest Service  
National Leadership Conference—Opening Remarks  
New Haven, CT—October 4, 2000

It's good to see all of you here this evening. Before you get too relaxed, I'd like us all to acknowledge our host tonight, our partner, the Yale School of Forestry and Environmental Studies. This year, the school is celebrating a century of service to American forestry. I'd like to make a few remarks about our history of partnership and about the new challenges we will face together in the 21st century.

### **Central Messages**

1. The Forest Service has enjoyed a long partnership with the Yale School of Forestry and Environmental Studies in training our leaders in sustainable forest management.

2. Our partnership will face new challenges in the 21st century. The Forest

Service will need employees with skills and knowledge in nonforestry areas.

*This fiscal year we plan to hire — new employees <sup>not only forestry but</sup> <sup>may other</sup> <sup>disciplines</sup>*

## Background for Message 1: Partnership

- Gifford Pinchot went to Yale in 1885 and graduated in 1889. He went to study forestry.
- He took courses in everything but forestry—meteorology, botany, geology, astronomy.
- Pinchot (*Breaking New Ground*): <sup>stated in</sup> As for forestry itself, there wasn't even a suspicion of it at Yale. The time for teaching forestry as a profession was years away.
- At the time, no American institution offered forestry. Cut-and-run forestry was rampant. The European tradition of sustainable forest management was widely considered impractical and needless in the United States. The forests seemed endless, so why worry?
- Pinchot's father, James W. Pinchot, profited from cut-and-run forestry but wanted to give something back to the land. So he urged his son to become a forester.
- Gifford went to Europe for forestry training in France, Germany, and Switzerland. When he returned, he saw European forestry's limitations when

applied to American forest conditions. Through field work, he adapted his forestry training to American conditions.

- In 1900, as head of the USDA Division of Forestry, Pinchot had trouble finding trained foresters for his expanding division.
- Pinchot: "We needed American foresters trained by Americans in American ways for the work ahead in American forests."
- He discussed the problem with his colleague and fellow Yale graduate Henry S. Graves. Then he went to his parents, who put up the money for the first thoroughly American forestry school—the Yale School of Forestry.
- The Yale School of Forestry was founded in 1900, the same year that SAF was cofounded by Gifford Pinchot, Henry Graves, Overton Price, E.T. Allen, William Hall, Ralph Hosmer, and Thomas Sherrard.
- For the school's first 25 years, the summer school and the school's experimental forest were at Grey Towers.
- Henry Graves served as the school's first dean, then followed in Pinchot's footsteps as the second Forest Service Chief.
- Pinchot served on the school's governing board and lectured as a professor. In *Breaking New Ground*, he listed some of its early accomplishments:
  - Set the standard for forestry education in the United States.

- Helped establish forestry as an academic discipline at a time when there were only a handful of American foresters.
- In 1900, when the school was founded, there were only 40 forestry students in all of the United States. By 1940, just two generations later, our Nation had 6,000 professionally trained foresters.
- **Furnished most of the Forest Service's early leaders, including visionaries like Aldo Leopold. Every Forest Service Chief until 1940 was either a founder or a graduate.**
- **Today, the Yale School of Forestry is the oldest forestry school in continuous operation in America.**
- **The school has educated more than half of the Forest Service Chiefs to date (the last was John McGuire). For the first half century of its existence, it was effectively an academy for the Forest Service.**
- Since 1900, some 55 other forestry schools have sprung up, mostly at land grant universities. Increasingly, nonforesters are occupying Forest Service leadership positions.
- **Yale has become a place for training Forest Service leaders through:**
  - **Its degree programs.**
  - **Its executive training programs, such as leadership seminars.**

*Jim  
Brown*

## Background for Message 2: Future Challenges for Natural Resource

### Education

*We must meet the challenges that lie ahead*

*1500 new employees*

- For sustainable forest management in the 21st century, the Forest Service will need employees with vastly expanded skills and knowledge in areas that traditionally have little to do with forestry.
- Water will loom ever larger as an issue.
  - The national forests and grasslands furnish drinking water for more than 60 million Americans.
  - We are rapidly depleting many of our major water sources, such as the Ogallala Aquifer on the Great Plains.
  - One-third of our croplands produce for export. It takes a thousand tons of water to produce a single ton of grain. We are exporting our water through food.
  - Watershed issues cover a broad range of disciplines, including hydrology, geology, soils science, biology, wildlife management, history, sociology, and political science.
  - We will need employees with the education and training required to understand watershed issues on a landscape level and to

address those issues across jurisdictional boundaries on an ecosystem basis.

- We cannot measure land health in terms of traditional forest outputs such as board feet.
  - Through the Montreal Process, we are developing criteria and indicators for sustainable forest management.
  - **We will need employees with the training and education required to collect data and build information technology systems to support our future criteria and indicators for measuring the health of the land.** Example: Our Forest Health Monitoring Program.
- The workings of the land are so complex that we often fail to understand the consequences of what we do.
  - Examples: fuel buildups due to fire suppression; introduction of kudzu, an invasive species, to control erosion.
  - **We will need employees with the education and training required to plan and conduct research to improve our understanding of the land and to find practical solutions to our problems—for example, new uses for small-diameter fuels.**
- **Technical engineering won't solve most natural resource problems.**
  - Most problems derive from how people behave and interact.

- Aldo Leopold: “The real substance of conservation lies not in the physical projects of government, but in the mental processes of citizens.”
- Recreational pressures:
  - 1995: 189 million Americans enjoyed some form of outdoor recreation.
  - 1996: On any given day, we had 1.7 million recreational vehicles on our forest roads. By contrast, we had only 15,000 logging vehicles.
- Consumption:
  - 1965 to 1999: Paper consumption increased per capita by 90 percent; timber harvest on the national forests declined by about 70 percent.
  - 1971 to 1996: Average home size grew from 1,520 square feet to 2,120 square feet; average family size dropped by 16 percent since 1970.
- Land use:
  - 1992 to 1997: nearly 16 million acres of open space converted to urban or other uses.

- 57 percent of our Nation's forestlands are on small private woodlots, many of which are being subdivided and sold, then converted to other uses.
- **Individual citizens—as recreationists, consumers, homeowners, woodlot owners—will make choices that will decide the future health of our land.**
- **We will need Forest Service employees who have the communication skills to reach our citizens with messages about our land ethic and about the need for a national consumption ethic. They must have:**
  - Proficiency in clear, plain English.
  - Familiarity with collaborative problem solving.
  - Training for recreational programs.
  - Training for programs in land stewardship and urban forestry—the places where people live.
  - Leadership training (e.g., strategic planning).
  - Broad education in social and political history as a basis for communicating with people from multicultural backgrounds.

- History teaches that the pace of change—social as well as technological—is ever increasing. Our information about the land is subject to revolutionary change.
  - Examples: The ecosystem-based approach to land management and discoveries about fire's role in ecosystems have revolutionized the way we look at and manage the land.
  - **We will need Forest Service employees who keep pace with new discoveries through a lifetime of continuous learning.**
  - Henry Graves: “In the final analysis, it is self-education that enables one to continue intellectual growth and lead in thought and practice.”
- We will increasingly face global challenges.
  - Vicious cycle: Deforestation takes away the land’s ability to hold soil and water; the degraded land can provide fewer resources; people must further degrade the land to eke out a living. Example: Ancient Greece.
    - Similar cycles now threaten many parts of the world.
    - Worldwide, a billion people live in poverty.
    - Our land ethic means nothing to people with no food, no fuel, no hope. The great German dramatist Bertolt Brecht: “First comes eating, then comes morality.”

- Many emigrate to the United States, placing additional pressure on resources here.
- Through our appetite for wood, the United States is exacerbating forest problems in other countries. Example: softwood imports from Canada.
  - 1991 to 1996: Canadian imports rose from 11.5 to nearly 18 bbf per year.
  - Old-growth timber harvest in northern Quebec is now a public issue in Canada.
- **We will need Forest Service employees with the skills and training to address natural resource issues on a global level, employees who:**
  - **Understand and communicate the global implications of consumption choices and land use decisions in the United States.**
  - **Have language skills and cultural familiarity required for stabilizing and rebuilding natural resources in other countries, to restore hope for the poor.**
- The face of America will look very different in the coming decades.

- By the year 2050, a majority will no longer be of European ancestry.
  - 86 percent of immigration is now non-European.
  - 90 percent of our population growth by 2050 will come from racial and ethnic minorities.
- Americans are growing older; proportion of U.S. population over 65:
  - 1900: 4 percent
  - 2020: 21 percent
- Americans are growing more urban; from 1940 to 1990:
  - Rural population remained stable, at a little over 50 million.
  - Total population grew from about 130 million to more than 250 million—increase almost all urban.
- Challenge: Dealing with changing cultural expectations about natural resources and public lands, and changing patterns of recreation and resource use.
- We will need Forest Service employees who keep up with the changing face of America. We will need:  
*environmental studies*
  - Forestry curricula designed to attract people from diverse backgrounds—more women, more people of non-European ancestry.

- Employees trained to serve our underserved urban and minority communities through volunteer programs and urban forestry.

Fragmentation Symposium etc  
need #  
State & Private

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Invite Dean Gus Sath  
Commemoration of the Centennial of the  
Yale School of Forestry &  
Environmental Studies

We thought we could fix things

## **An Enduring Partnership**

Chief Mike Dombeck, USDA Forest Service  
National Leadership Conference—Opening Remarks  
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## Enhancing our Conservation Legacy

Forest Service Chief Mike Dombeck  
National Leadership Conference  
New Haven, CT—October 5, 2000

Internet

I want to thank the Yale School of Forestry and Environmental Studies for hosting us. I also want to thank Jim Lyons, who will be here this week, and Secretary Glickman for their leadership over the past years. Yale will be lucky to have someone with the unique experience that Jim brings.

When we last met as a leadership team in Missoula, MT, I had the honor of bestowing the title of Chief Emeritus upon two of my predecessors, John McGuire and Dale Robertson. John led the Forest Service through controversial times and the implementation of landmark legislation, the National Forest Management Act. Dale began the Forest Service's shift to ecosystem management and championed recreation on our national forests and grasslands. Many of us participated in the Retirees' Reunion last month in Missoula, where we had the pleasure of honoring John and Dale. We are privileged in the Forest Service to stand on the shoulders of those who built the foundations for our future.

This has been one of the busiest years of my professional life, and the same is likely true for most of you. The 2000 fire season has posed enormous challenges. We have spent nearly \$1.4 billion out of our appropriation for firefighting on almost 7 million acres of land this year. We've all been on call, moving around the country to support our firefighters, the brave women and men on the fireline. They deserve our support and gratitude for their heroic efforts to protect lives, property, and natural resources.

The 2000 fire season stretched us to the limit. Great and positive change, however, often comes from periods of great stress. On a recent trip to the fires in Montana, I visited my oldest brother, Dan, who was working at the Canyon Ferry Fire incident command post. A friend asked him, "How's Mike doing?" Dan replied, "He's the same he's always been. He just looks older." Yes, the challenges are daunting. My hair gets grayer with each crisis; but the opportunities before us are immense. I firmly believe we are poised as never before to make great and positive gains from this decade or more of stress. The only limitation is our ability to quickly adapt to change.

### Policy Initiatives

Several years ago, in the face of growing criticism about the Forest Service's "mixed and muddled mission," this leadership team outlined a Natural Resource Agenda for the 21st Century. The Natural Resource Agenda lent focus and priority to our core mission of caring for the land and serving people. From that agenda flowed ambitious proposals to:

- Place renewed emphasis on watershed restoration.
- Make ecological sustainability the foundation for managing 192 million acres of public land;
- Develop a National Recreation Strategy;

- Revamp our road system;
- Protect roadless areas;
- Stabilize payments to States for distribution to counties for schools and roads; and
- Implement a Wilderness Agenda.

Taken in combination with efforts to improve financial accountability and implement regional initiatives in the Columbia River Basin, in the Sierra Nevada, and on the national grasslands, our Natural Resource Agenda pressured this leadership team and the rest of the agency in ways we have rarely been pressured before. Then, in the midst of an enormous public dialogue and healthy debate, we were confronted with one of the more challenging fire seasons in recent history.

Not only did we respond, we thrived. We met the challenges of the fire season head on and are still on track for completing the Natural Resource Agenda policy proposals. I'll return to fire in a moment, but first I want to update you on some of our major policy initiatives.

- We are in the process of finalizing our road policy. Our policy will make clear that decisions affecting public access to national forests are best decided in public forums at the local level and informed by sound science. Our policy will help to ensure that our road system, which faces an \$8.5 billion backlog in maintenance and reconstruction, is managed in a manner that ensures public access while reversing environmental damage. In the process, we've focused attention on our funding backlog: For the third year in a row, after years of declines, we've seen an increase in road maintenance dollars.
- After more than 400 public meetings and a million public comments, we are on track with our roadless area conservation policy to maintain large, unfragmented landscapes and the many social and economic benefits they provide to an increasingly urbanized and developed society.
- For a decade or more, we talked about developing new planning regulations. Within a few weeks, they will be finalized. They will help end the maddening cycle of planning without results, a cycle almost no one likes. We have learned from what worked and what didn't work. Our new planning regulations will establish collaborative, science-based decisions that are good for the land and good for people.
- Three years ago, we proposed decoupling the link between timber harvest levels and payments to States for distribution to counties for schools and roads. Based on extensive negotiations over the past year, we have reached agreement with Congress on a bill to stabilize these payments regardless of timber harvest levels. The bipartisan bill that we helped draft will provide counties guaranteed funding for schools and roads while reconnecting communities to public lands through stewardship, restoration, and maintenance projects that will provide jobs and restore land health. The citizen advisory councils created by the bill dovetail with our proposed planning regulations and will help us develop broad-based support for on-the-ground projects.
- Our wilderness agenda will ensure that we maintain the integrity of existing wilderness and that new wilderness proposals focus on high-priority areas currently missing from

this country's wilderness portfolio, such as grasslands and prairie ecosystems, old growth, and bottomland hardwood forests.

- Our National Recreation Agenda will guarantee the American people access to the lands they love in a manner that protects land health and water quality.

### **Restoration and Rehabilitation**

Our agenda for reconnecting communities to the lands that sustain them—for meeting the needs of people by securing the health of the land—will reap enormous dividends for the agency, the lands we manage, and the people we serve. Yet, it is in the area of watershed health and restoration and the opportunities created by the 2000 fire season that I am most excited.

Motivated by the severity of the 2000 fire season, Congress passed and the President signed a bill to increase our fiscal year 2001 appropriation by hundreds of millions of dollars. Few periods in our history have seen such enormous opportunities for growth and positive change.

Such opportunities are rare, but not without risk. Following a similarly severe fire season in 1994, the discussion quickly devolved into a fruitless and controversial debate over salvage logging. Based on conversations with the western governors and congressional leaders, I am hopeful we can avoid similar controversy in the wake of the 2000 fire season.

The growing consensus that we must restore our forests and protect our communities gives us the chance to build a constituency for active management based on ecologically conservative principals. Jack Ward Thomas was fond of saying that the Forest Service does best when its objectives are clearly defined. In Jack's words, "We don't do confusion very well." The National Fire Plan submitted by Secretary Glickman and Secretary Babbitt and accepted by the President lends clear direction and clarity to our objectives.

The Forest Service National Leadership Team developed the following principles to minimize controversy and maximize effectiveness in meeting our restoration and rehabilitation efforts:

1. Assist State and local partners to take actions to reduce fire risk to homes and private property through programs such as Firewise.
2. Focus rehabilitation efforts on restoring watershed function, including protection of basic soil and water resources, conservation of biological communities, and prevention of invasive species.
3. Assign the highest priority for hazardous fuels reduction to communities at risk, readily accessible municipal watersheds, threatened and endangered species habitat, and other important local features where conditions favor uncharacteristically intense fires.
4. Restore healthy, diverse, and resilient ecological systems to minimize uncharacteristically intense fires on a priority watershed basis. Methods may include removal of excess vegetation and dead fuels through thinning, prescribed fire, and other treatments.
5. Focus on achieving a desired future condition on the land, in collaboration with communities, interest groups, and State and Federal agencies. Streamline process, maximize ef-

fectiveness, use an ecologically conservative approach, and minimize controversy in accomplishing restoration projects.

6. Monitor to evaluate the effectiveness of various treatments in reducing uncharacteristically intense fires and in restoring forest ecosystem health and watershed function.
7. Provide jobs, encourage new stewardship industries, and collaborate with local people, volunteers, Youth Conservation Corps members, service organizations, and others, as appropriate.
8. Focus research on the long-term effectiveness of different restoration and rehabilitation methods to determine the methods most effective in protecting and restoring watershed function and forest health. Seek new uses and markets for byproducts of restoration.

## Priorities

These principles are intended to help us get the maximum amount of rehabilitation and restoration work done with the least amount of controversy. We need a sustained and increased level of funding to fix what ails our forests and rangelands. And money flows to things people want. Our priorities for restoration are:

- Protecting homes and communities;
- Protecting accessible municipal water supplies; and
- Protecting threatened and endangered species habitat.

We will not use funding for the National Fire Plan to put up new commercial timber sales. We will use service contracts, volunteers, Youth Conservation Corps, Forest Service work crews, and others to help accomplish our land health objectives. In the process, we will provide thousands of new jobs; new, locally based, sustainable stewardship industries; and wood products as a byproduct of accomplishing our land health objectives. Let me be clear. I strongly encourage you to use existing timber sale funding to embrace forest ecosystem restoration, wherever appropriate. We will not, however, use national fire plan funding to finance timber sales.

Our first priority will be to work with willing landowners through programs such as Firewise to reduce hazardous fuels and create defensible spaces around homes. The single most important thing a homeowner can do to keep safe from wildland fire is to take such measures as clearing vegetation within 30 to 100 feet from their homes. This is an arena where we can move quickly and without controversy to protect homes and private property. It will be our highest priority.

The 1995 interagency fire policy required that fire management plans be developed for each national forest and grassland. While it is not my intent, nor the expectation of Congress, that we conduct endless planning with new resources, fire plans are essential to help managers make more informed decisions about fire and fuels management. Advance planning leads to more thoughtful and effective decisions about which natural ignitions we should fight and which can be beneficial to let burn.

Congress and the American people will not support our efforts if we cannot provide demonstrable results. I expect every restoration project to:

- Take before-and-after pictures;
- Diligently monitor implementation and effectiveness; and
- Identify new research needs that will demonstrate which projects are most effective in accomplishing our community protection, land health, and water quality objectives.

### Managing Uncertainty

We must be smart in how we spend these new appropriations. The surest way to ensure that these levels of funding are *not* sustained is to propose projects that are certain to engender controversy and conflict. Ensure that initial treatment focuses on areas where risks to communities are greatest and on other managed and roaded areas where the risk of unintended adverse effects is least. Restoration involving roadless areas, road construction, or old-growth forests will not be a priority unless it is determined that the land's condition places a community at risk of uncharacteristically intense fire.

We know that thinning can help reduce the risks of crown fires. We are not as certain about the effects of thinning and other mechanical treatments on other forest values such as clean water, soil stability, wildlife and fish habitat, and so on. The fact is, we have a lot of learning to do. We do not have all the answers. We must temper the imperative of ramping up restoration activities with prudence. We all know of cases where well-intended stewardship projects produced unintended effects that actually further compromised land health.

In short, we must strike a balance between aggressive action and intelligent caution. We must make certain that we thoroughly document the results of our efforts and learn about what works, what doesn't, and why. We must communicate what we learn, even—perhaps especially—about projects that might not work as intended, to Congress and the American people. This is our chance to perform, to put our best foot forward for the health of the lands we manage and the communities we serve.

### Old Growth

I met the other day with John Dillon, the Chairman of International Paper. Two of the issues we discussed were old-growth forests and roadless areas. We agreed that, for too long, we have allowed the issue of old-growth forests and roadless areas to serve as poster children for both sides of the conflict industry.

The fact is that we ought to celebrate the fact that national forests serve as a reservoir for old-growth forests and the values associated with these forests, values such as biodiversity. Within the United States, most forests that are late successional, old growth, ancient—whatever your favorite moniker is—are found on national forests. In the not-so-distant past, these old trees were viewed as “decadent.” Today, we recognize the incredibly unique contribution of national forests to maintaining and expanding the habitat and values provided by old-growth forests.

Our management objectives within these forests should focus on maintaining and enhancing old-growth values and old-growth characteristics. I can anticipate what our critics might charge—that by protecting these forests, we are abandoning our commitment to multiple use and active management. In fact, the opposite is true. John Dillon and I discussed the immense opportunity we have to demonstrate how active management—prescribed fire, thinning, and other mechanical treatments—can enhance forest ecosystem health and resiliency in fire-adapted forests where fire has been excluded. More than 50 million acres of forests and grasslands are at risk of uncharacteristically intense fires that can threaten communities, water quality, soils, and habitats. This is where we must focus our work.

What we *do not* need to do is harvest old-growth trees to accomplish our restoration objectives. In some cases, when old-growth resources and values are threatened by the risk of uncharacteristically intense fire, we might choose to carefully thin and burn understory vegetation while leaving older, larger trees standing. We will protect and enhance these ecologically sensitive areas and focus restoration on the already roaded and managed portions of the landscape where present conditions might pose a risk to communities, accessible municipal watersheds, or threatened and endangered species habitat.

### **Changing Times**

I recently reread a letter from a few years ago that threatened to fund the agency at a significantly diminished, “custodial” level because we were allegedly not producing commodities commensurate with our level of funding at the time. Times have changed. In fiscal year 2001, our annual budget is projected to grow from \$2.9 billion to \$4.4 billion, including repayments to fiscal year 2000 fire suppression accounts, a 47-percent increase. Congress has authorized or appropriated:

- Hundreds of millions of dollars in new appropriations for watershed protection, restoration, and rehabilitation;
- \$1.1 billion in new funding over the next 5 years to stabilize payments to States for distribution to counties for schools and roads, and for stewardship, restoration, and maintenance projects on national forests; and
- More than \$200 million in new conservation funding through the Land and Water Conservation Fund and the President’s Lands Legacy program.

At the same time, Congress reduced the number of our budget line items from more than 30 to just 13, adding to our flexibility. Additionally, the Forest Service acquired more than a quarter of a million acres of new public lands through the Land Between the Lakes and Baca Ranch acquisitions. These are nationally significant natural resource treasures. It is to our credit that Congress and the Administration trust us to manage them in the national interest.

Today, Congress and the American people are showing us more trust than ever, placing us more in control of our own destiny. With added trust comes added responsibility. There’s an old joke: The definition of insanity is doing what you’ve always done but expecting different results. We have an obligation to change our way of doing things in keeping with the changing times.

Yes, change can be stressful. Yes, the challenges we face are sometimes new and always daunting. But we have a window of opportunity to show the American people that we deserve their trust.

No single one of us can do it alone. I am counting on all of you to work together. Spread the word. Keep pushing the system. Push funding to the lowest level of the organization. Cut the process and cut red tape. Demand results that benefit the land and the communities at risk from uncharacteristically intense wildland fire.

The *Investor's Business Daily* published a list of the 10 traits of a successful organization. Number one on the list is a positive attitude. We are up to the task. Conservation sells because Americans understand that we cannot sustain our incredible national wealth without protecting its source—the lands and waters that sustain us all.

This is our legacy and our challenge. I am confident we are up to the task.

## FINAL DRAFT

Enhancing our Conservation Legacy  
Mike Dombeck  
New Haven, CT, October 5, 2000

I want to thank the Yale School of Forestry, the first School of Forestry for hosting us. I also want to thank Jim Lyons who will be here later today and Secretary Glickman for their leadership over the past years. Yale will be lucky to have someone with the unique amount of practical experience that Jim brings, to his job, at the University.

When we last met as a leadership team in Missoula, Montana, I had the honor of bestowing two of my predecessors, Dale Robertson and ~~Jack Ward~~ <sup>John McQuinn</sup> Thomas, with the title of Chief Emeritus. Dale led the Forest Service shift to ecosystem management and ~~Jack saw it through to fruition in the Pacific Northwest and elsewhere.~~ <sup>Championed recreation implementation of HFMA</sup> We are privileged in the Forest Service to stand on the shoulders of such giants.

*many of us participated in the retired reunion*

*foundation they built*

*Very Hard*  
This has been one of the busiest years of my professional life, and the same is likely true for most of you. The 2000 fire season has posed enormous challenges. We have spent nearly \$800 million ~~over~~ <sup>B</sup> billion fighting fire on almost 7 million acres of land this year. We've all been on call, moving around the country to support our firefighters, the brave women and men on the fire-line. They deserve our support and gratitude for their heroic efforts to protect lives, property, and natural resources.

*Montana*  
The 2000 fire season stretched us to the limit. Great and positive change, however, often comes from periods of great stress. On a recent trip to the fires in Idaho, I visited my <sup>old</sup> brother, Dan. A friend asked him, "how's Mike doing?" Dan replied, "He's the same he's always been. He just looks older." Yes, the challenges are daunting. My hair gets grayer <sup>with each crisis</sup> after every congressional hearing but the opportunities before us are immense. I firmly believe we are poised as we have never been before to make great and positive change from this period <sup>decade or more</sup> of stress. *The only limitation is the ability of the FS to adopt*

*who worked at Helldog friend, comand, Canyon Ferry*

Several years ago, in the face of growing criticism about the Forest Service's "mixed and muddled mission," this leadership team outlined a Natural Resource Agenda for the 21<sup>st</sup> Century. The Natural Resource Agenda lent focus and priority to our core mission of caring for the land and serving people. From that agenda flowed ambitious proposals to:

- Revamp our road *system*;
- Protect roadless areas;
- Make ecological sustainability the basic foundation for management of 192 million acres of public land;
- Stabilize payments to counties for schools and roads;
- Implement a Wilderness Agenda;
- Develop a National Recreation Strategy; and
- Place renewed emphasis on watershed restoration.

Taken in combination with efforts to improve financial accountability and implement regional initiatives in the Columbia River Basin, Sierra Nevada, and National Grasslands, the agenda pressured this leadership team and the rest of the agency in ways we have rarely been pressured before. Then, in the midst of an enormous public dialogue and healthy debate, we were confronted with one of the more challenging fire seasons in recent history.

Not only did we respond, we thrived. We met the challenges of the fire season head on and are still on track to completing the Natural Resource Agenda policy proposals. I'll return to fire in a moment but first want to update you on some of our major policy initiatives.

- We are in the process of finalizing our road policy. It will make clear that decisions that affect public access of National Forests are best decided in public forums at the local level and informed by sound science. It will help to ensure that our road system, which faces an \$8.5

Maureen  
10/04/00

*this is the 3rd year is a year to work it.*

billion backlog in maintenance and reconstruction, is managed in a manner that ensures public access while reversing environmental damage.

- After more than 400 public meetings and one million public comments, we are on track to *with our* implement a roadless area conservation policy *Maintain* will protect large, unfragmented landscapes and the many social and economic benefits they provide to an increasingly urbanized and developed society.
- For *a decade* nine years or more, we talked about developing new planning regulations. Within a few weeks, they will be finalized. They will help end the maddening cycle of planning without results, and replace it with collaborative, science-based decisions that are good for the land and good for people.  
*that almost no-one likes  
we must learn from what worked  
and what didn't*
- Three years ago, we proposed decoupling the link between payments made to *states* counties for schools and roads that were based upon timber harvest levels. Based on extensive negotiations

over the past year, we have reached agreement with Congress on a bill to stabilize these payments regardless of timber harvest levels.

The bipartisan bill that we helped draft will provide counties guaranteed funding for schools and roads while reconnecting communities to public lands through stewardship, restoration, and maintenance projects that will provide jobs and restore land health. The citizen advisory councils it would create dovetail with our proposed planning regulations and will help us to develop broad based support for on-the-ground projects.

- Our wilderness agenda will ensure that we maintain the integrity of existing wilderness and that new wilderness designations focus on high priority areas such as grasslands and prairie ecosystems, old growth, and low elevation forests. *bottom land hardwoods*
- Our National Recreation Agenda will guarantee the American people access to the lands they love in a manner that protects land health and water quality.

*currently missing from  
the country's  
wilderness portfolio*

## Restoration and Rehabilitation

Our agenda for reconnecting communities to the lands that sustain them – for meeting the needs of people through securing the health of the land – will reap enormous dividends for the agency, the lands we manage, and the people we serve. Yet, it is in the area of watershed health and restoration and the opportunities created by the 2000 fire season that I am most excited.

In the aftermath of the 2000 fire season, the President requested and Congress is acting on a budget that could increase our FY 2001 appropriation by well over one billion dollars. There are few periods in our history where such opportunity for growth and positive change occurred.

Such opportunities are rare, but not without risk. Following a similarly intense fire season in 1994, the issue quickly devolved to a fruitless and controversial debate over salvage logging. Based on conversations with the western Governors and

congressional leaders, I am hopeful we can avoid similar controversy in the wake of the 2000 fire season.

The growing consensus that we must restore our forests and protect our communities provides us the chance to build a constituency for active management based on ecologically conservative principals. Jack Thomas <sup>words</sup> is fond of saying that the Forest Service does best when its objectives are clearly defined. In Jack's words, "we don't do confusion very well." The National Fire Plan recommended by Secretary Glickman and Secretary Babbitt, and accepted by the President, lends clear direction and clarity to our objectives.

The Forest Service National Leadership Team developed the following principles to minimize controversy and maximize effectiveness in meeting our restoration and rehabilitation efforts:

1. Assist state and local partners to take actions to reduce fire risk to homes and private property through programs such as FIREWISE.

2. Focus rehabilitation efforts on restoring watershed function including, protection of basic soil, water resources, biological communities, and prevention of invasive species.
3. Assign highest priority for hazardous fuels reduction to communities at risk, readily accessible municipal watersheds, threatened and endangered species habitat, and other important local features, where conditions favor uncharacteristically intense fires.
4. Restore healthy, diverse, and resilient ecological systems to minimize uncharacteristically intense fires on a priority watershed basis. Methods may include removal of excessive vegetation and dead fuels through thinning, prescribed fire, and other treatment methods.
5. Focus on achieving a desired future condition on the land in collaboration with communities, interest groups, and state and federal agencies. Streamline process, maximize effectiveness, use an ecologically conservative approach, and

minimize controversy in accomplishing restoration projects.

6. Monitor to evaluate the effectiveness of various treatments to reduce unnaturally intense fires, while restoring forest ecosystem health and watershed function.
7. Encourage new stewardship industries and collaborate with local people, volunteers, Youth Conservation Corps members, service organizations, and Forest Service work crews, as appropriate.
8. Focus research on the long-term effectiveness of different restoration and rehabilitation methods to determine those methods most effective in protecting and restoring watershed function and forest health. Seek new uses and markets for byproducts of restoration.

These principles are intended to help us to get the maximum amount of rehabilitation and restoration work done with the least amount of controversy. We need a sustained and increased level of funding to

fix what ails our forests and rangelands. And money flows to things people want. Our priorities for restoration will include:

- Protecting homes and communities;
- Protecting accessible municipal water supplies;
- Protecting threatened and endangered species habitat.

### Creating Jobs

*Intent is not to*

*With thanks*

What we will not do is use this new funding to put up new commercial timber sales. To be certain, I want you all to see that existing timber sale funding <sup>focus</sup> is used to enhance forest ecosystem restoration, wherever appropriate. We will not however, use new funding to fund new timber sales. Instead, we will use service contracts, volunteers, Youth Conservation Corps, Forest Service work crews, and others to help accomplish our land health objectives. In the process, we will provide hundreds of thousands of new jobs, new locally-based, sustainable stewardship industries, and other wood

products as a byproduct of accomplishing our land health objectives.

## Reducing Risk on Private Property

Our first priority will be to work with willing landowners through programs such as FIREWISE to reduce hazardous fuels conditions and create defensible spaces around homes. This is an arena that we can move quickly and without controversy to protect homes and private property. It will receive our highest priority.

*The single most important thing a home owner can do to prevent their house from burning is 200-500' from the house.*

## Fire Plans

The 1995 interagency fire policy required that fire management plans be developed for each National Forest and Grassland. While it is not my intent, nor the expectation of Congress, that we will conduct endless planning with new resources, these plans are essential to helping managers make more informed decisions about fire and fuels management.

Advance planning leads to more thoughtful and effective decisions about which natural ignitions we should fight and which may be beneficial to let burn.

## Research and Monitoring

*I want to see  
to next  
to tell  
results*

Congress and the American people will not support our efforts if we cannot provide demonstrable results. I expect every restoration project to: take before and after pictures, diligently monitor implementation and effectiveness, and identify new research needs that will demonstrate those projects that are most effective in accomplishing our community protection, land health and water quality objectives.

## Managing Uncertainty

We must be smart in how we spend these new appropriations. The surest way to ensure that these levels of funding are *not* sustained is to propose projects that are certain to engender controversy and conflict. My direction to you is to ensure that initial treatment efforts focus on those areas where risks to communities are greatest and in other managed and roaded areas where the risk of unintended consequences is least. Restoration involving <sup>woodless areas</sup> new road construction or extensive mechanical

?

treatments will not be a priority unless it is determined that their condition places a community at risk of unnaturally intense fire.

We know that thinning may help to reduce the risks of crown fires. We are not as certain about the effects of thinning and other mechanical treatments on other forest values such as clean water, soil stability, wildlife and fish habitat, and so on. The fact is we have a lot of learning to do. We do not have all the answers. We must temper the imperative of ramping up restoration activities, with prudence. We all know of examples where well-intended stewardship projects produced unintended effects that actually further compromised land health.

In short, we must strike a balance between aggressive action and intelligent caution. We must make certain that we thoroughly document the results of our efforts and learn about what works, what doesn't and why. We must communicate what we learned – even, perhaps especially those projects that may not have worked as intended – to Congress and the American people. This is our chance to

perform, to put our best foot forward for the health of the lands we manage and the communities we serve.

## Old Growth

I met the other day with John Dillon, the Chairman of International Paper. Two of the issues we discussed were old growth forests and roadless areas. Both of us agree that we have allowed the issue of old growth forests and roadless areas to serve as poster children for both ends of the conflict industry for too long.

*of biodiversity*

The fact is that we ought to celebrate the fact that National Forests serve as a reservoir for old growth forests and the values associated with these forests. Within the United States, most of the late successional, old growth, ancient forests – whatever your favorite moniker is – are found on National Forests. In the not so distant past, these old trees were viewed as “decadent.” Today, we recognize the incredibly unique contribution of National Forests to maintaining and expanding the habitat and values provided by old growth forests.

Our management objectives within these forests should focus on maintaining and enhancing old growth values and old growth characteristics. I can anticipate what our critics may charge – that by protecting these forests, we are abandoning our commitment to multiple use and active management. In fact, the opposite is true. John Dillon and I discussed the immense opportunity we have to demonstrate how active management – prescribed fire, thinning, and other mechanical treatments – can enhance forest ecosystem health and resiliency in fire adapted forests where fire has been excluded. More than 50 million acres of forests and grasslands are at risk of unnaturally intense fires that can threaten communities, water quality, soils, and habitats. This is where we must focus our work.

What we *do not* need to do is harvest old growth *forests* ~~trees~~ to accomplish our restoration objectives. In some cases when old growth characteristics are threatened by the risk of unnaturally intense fire, we will leave older, larger trees standing while thinning and burning in the understory, if appropriate. We will protect and enhance these ecologically sensitive

areas and focus restoration on the already roaded and managed portions of the landscape where present conditions may pose a risk to communities, accessible municipal watersheds, or threatened and endangered species habitat.

## Conclusion

I recently re-read a letter from a few years ago that threatened to fund the agency at a significantly diminished, "custodial" level because we were allegedly not producing enough commodities commensurate to our then present level of funding. Times have changed. For example, in the immediate future:

- We may receive well more than one billion dollars of new appropriations for watershed protection, restoration, and rehabilitation.
- More than one billion dollars in new funding over the next six years to stabilize payments to counties for schools and roads and stewardship, restoration, and maintenance projects on National Forests.

- Hundreds of millions of dollars in new conservation funding through the Land and Water Conservation Fund and the President's Lands Legacy program.

Additionally, the Forest Service acquired more than a quarter of a million acres of new public lands in the Land Between the Lakes and Baca Ranch acquisitions. These are nationally significant, natural resource treasures. It is to our credit that Congress and the Administration trust us to manage them in the national interest.

Periods of great stress elicit great change. Keep pushing the system. Push funding to the lowest level of the organization. Cut the process and red tape. Demand results that benefit the land and communities at risk of unnaturally intense wildfire. We are up to the task. Conservation sells because people understand that we cannot sustain our incredible wealth without protecting its source – the lands and waters that sustain us all.

Frugality is defined  
as doing things the way  
we've always done them and  
expecting different results

Positive attitude  
Spread the word!

18  
We are more in control  
of our destiny than  
ever.

Trust  
Flexibility

This is our legacy and our challenge. I am confident we are up to the task.

**FOREST SERVICE NATIONAL LEADERSHIP CONFERENCE**  
***"Finding Common Ground: The Next Century of Service"***  
**Yale University, New Haven**  
**October 4 - 6, 2000**  
**Agenda**

**Wednesday, October 4**  
**Bowers Auditorium, Sage Hall, 205 Prospect Street**

6 p.m. Reception and registration  
(Light hors d'oeuvres will be provided.)

7 p.m. Program

- Welcome to the Yale School of Forestry and Environmental Studies  
*Gus Speth, Dean, Yale School of Forestry and Environmental Studies*
- Remarks on the Centennial  
*Mike Dombeck, Chief, Forest Service*
- Remarks on the history of the Yale School of Forestry and Environmental Studies and the Forest Service  
*Edith MacMullen, Yale University*

8 - 9:20 p.m. Buses depart Bowers for hotels (See bus schedule in registration packet.)

must  
Respond to  
Forces

3 threats

1. Become environmentalists - to prove over forest come whole
2. Avoid the threat of industrialization wood has never been the reason for keeping forests as forests - explain ecosystem use knowledge values
3. Don't get academized disciplines are obsolete

**Thursday, October 5**

**Yale Peabody Museum of Natural History, 170 Whitney Ave., 3<sup>rd</sup> floor**

**Moderator: Michael Rains, Director, Northeastern Area, State and Private Forestry**

6:40 – 8 a.m. Buses depart from hotels for the Peabody Museum (See schedule.)

7 – 8 a.m. Morning gathering in Mineral Hall, just outside Auditorium  
(Coffee, tea and pastries will be provided.)

8 a.m. Welcome and introductions  
**Michael Rains**

8:10 a.m. Welcoming remarks  
**John Gordon, Gifford Pinchot Professor of Forestry and past Dean of  
Yale School of Forestry and Environmental Studies**

8:35 a.m. Opening remarks  
**Mike Dombeck**

8:55 a.m. Introduction of theme and day's focus on non-federal forest lands  
**Michael Rains**

9 a.m. Panel discussion on Chicagoland: Leadership Across the Landscape, which addresses issues related to the Chicago Wilderness, Asian Longhorned Beetle, City of Chicago Green Streets and Social Science Research, moderated by **Michael Rains**

Panelists:

- **Gina Childs, Info. Management Group Leader, Northeastern Area (MN)**
- **John Dwyer, Project Leader, North Central Research Station (IL)**
- **Suzanne Malec, Deputy Commissioner, Dept. of Environment, Chicago**

10 a.m. Break  
(Coffee and tea will be provided in Mineral Hall.)

10:30 a.m. Panel discussion on NYC Watershed: Leadership in Collaborative Stewardship, which addresses issues related to Legacy, Stewardship, Urban Forestry and Economic Action, moderated by **Michael Rains**

Panelists:

- **Ira Stern, New York City Department of Environmental Protection**
- **Brian Fisher, Forestry Program Mgr., NY Watershed Agricultural Council**
- **Marcus Phelps, Highlands Coordinator, Northeastern Area (NJ)**

11:30 a.m. Luncheon at New Haven Lawn Club (1/2 block from the Peabody Museum) with speaker **Dr. William Burch, Jr., Hixon Professor of Natural Resources Management and Founder of the Urban Resource Initiative, Yale University**, on "A Fresh Look at Forestry"

**Thursday, continued**

1:15 p.m. Begin loading buses at New Haven Lawn Club for afternoon field trip

1:30 p.m. Depart New Haven Lawn Club for field trip on urban forestry issues

4 p.m. Buses return to Omni New Haven Hotel parking lot

4:15 p.m. Buses depart for optional tour of Ansonia lab

5 p.m. Tour of Quarantine Laboratory (Ansonia, CT) of the Northeastern Center for Forest Health Research (Hamden, CT)

6:30 p.m. Buses return from lab to hotels

**Friday, October 6**

**Yale Peabody Museum of Natural History, 170 Whitney Ave., 3<sup>rd</sup> floor**

**Moderator: Robin Thompson, Associate Deputy Chief, State and Private Forestry**

6:40 – 7:20 a.m.	Buses depart from hotels for the Peabody Museum (See schedule.)
7 – 8 a.m.	Morning gathering in Mineral Hall, just outside Auditorium (Coffee, tea and pastries will be provided.)
8 a.m.	Welcome <b>Robin Thompson</b>
8:05 a.m.	Remarks <b>Jim Lyons, Under Secretary for Natural Resources and the Environment, USDA</b>
8:20 a.m.	New Century of Service Initiative <b>Linda Feldman, New Century of Service Program Manager and Donna Hepp, Supervisor, White Mountain National Forest</b>
8:30 a.m.	Panel discussion on Sustainable Resource Management, moderated by <b>Robert Lewis, Deputy Chief, Research and Development</b>  Panelists: <ul style="list-style-type: none"><li>• <b>Gerald Rose, Minnesota State Forester and Chair, Select Committee on Sustainability, Nat'l Assoc. of State Foresters</b></li><li>• <b>Nick Brown, Manager for U.S. Forest Conservation, World Wildlife Fund</b></li><li>• <b>Larry Nielsen, Director, School of Forest Resources, Pennsylvania State University</b></li></ul>
9:30 a.m.	Break (Coffee, tea and pastries will be provided in Mineral Hall.)
10 a.m.	Panel discussion on Making Collaboration Work, moderated by <b>Ann Bartuska, Director, Forest and Range Management</b>  Panelists: <ul style="list-style-type: none"><li>• <b>Mary Mitsos, Director, Community-Based Forest Stewardship, Pinchot Institute</b></li><li>• <b>Bill DuBuys, Project Director, Valle Grande Grass Bank, The Conservation Fund</b></li><li>• <b>Brett KenCairn, Executive Director, Indigenous Community Enterprises, Northern Arizona University</b></li></ul>
11 a.m.	Emerging Forest Service Issues, moderated by <b>Robin Thompson</b>

**Friday, continued**

11 a.m. Status of Appropriations  
***Hank Kashdan, Acting Director, Program Development and Budget***

11:15 a.m. Transition Planning  
***Randy Phillips, Deputy Chief, Programs and Legislation***

11:30 a.m. Next Steps: The National Fire Report  
***Michael Rains, Team Leader, Fire Report Implementation***

11:50 a.m. Additional Topics

noon **Herb Kaufman, Senior Fellow, Brookings Institution**, retired and author of the  
*Forest Ranger: A Study in Administrative Behavior*

12:45 p.m. Closing remarks  
***Phil Janik, Chief Operating Officer***

1 p.m. Meeting Adjourns

1:15 p.m. Buses depart Peabody for hotels

###

## Healthy Watersheds for Healthy Lands and Communities

Chief Mike Dombeck, USDA Forest Service  
Society of Environmental Journalists, 10th Annual Conference  
Lansing, MI—October 20, 2000

It's a pleasure to join you here today to discuss the challenges we face in restoring and maintaining healthy lands across North America. I'd like to thank Jay Letto of the Society of Environmental Journalists for setting up this session and John Flescher for his skill as moderator. I commend the society for promoting discussion about environmental issues through its outstanding annual conferences.

I'd also like to extend a warm welcome to Dr. Yvan Hardy, my colleague from Canada. We have a long history of working together as neighbors to address natural resource issues of mutual concern. Just this past summer, Canada helped reinforce our thinly stretched firefighting forces in the interior West. We deeply appreciate your timely assistance!

Before taking your questions, I'd like to address a subject critical to the future of our Nation, critical to our very survival: water. If I'm successful here today, you will all go home and start researching articles and books about water. We all require pure, clean water. We need it to drink; to grow our food; to conserve our forests and rangelands; to maintain a rich variety of fish and wildlife; and to enjoy the many pleasures of life—swimming, fishing, canoeing, boating, sailing, the list goes on and on. At the Forest Service, our first and highest calling must be to protect and restore the quality of our Nation's water sources.

### Water Crisis

Earth is called "the water planet," and for good reason. Seventy percent of the Earth's surface is covered with water. However, more than 99 percent of the Earth's water is saltwater or locked up in ice. How much water is annually renewable and available in rivers and lakes for human consumption? Less than 8 ten-thousandths of 1 percent—that's 0.00008 percent.

This meager amount is unevenly distributed and often poorly managed. Many parts of the world face a water crisis. According to the World Bank:

- 1.3 billion people lack access to adequate supplies of clean drinking water.
- 3 billion people lack sufficient water for sanitation.
- 10,000 people die every day from diseases related to polluted water and poor sanitation.
- Thousands more suffer from debilitating diseases.

In 1991, at the time of the Gulf War, a source in Jordan told the *Washington Post*: "You think we have bad fights over oil. Just wait until we start fighting over water."

In North America, we like to think we are immune to water wars. After all, we have plenty of water, or so it seems. But large parts of the United States, including some of our fastest growing

regions, have limited or declining water supplies. Consider:

- In California, water is the single most volatile issue statewide—specifically, how much water to divert from the north to the arid south.
- In the arid Southwest, battles are brewing over the waters of the Colorado River. Already, we are draining the Colorado so badly that the wetlands at the river's mouth in Mexico are a sickly remnant of their former splendor.
- On the Great Plains and elsewhere, we are mining our aquifers—there's no other word to describe it. Our largest aquifer, the Ogallala Aquifer, supplies a region from South Dakota to Texas. Since the 1940's, the Ogallala Aquifer has dropped by more than 10 feet, with some areas of Texas losing nearly 100 feet. Aquifers can take thousands of years to recharge. For all practical purposes, once they're gone, that's it.

### **The National Forests: Our Nation's Headwaters**

You might ask why a Forest Service Chief should care so much about water. When most people think of the 192-million-acre National Forest System, they think of forest products, livestock grazing, mineral extraction, wildlife management, outdoor recreation, and wilderness experiences. What do forests have to do with water conservation?

Water and soil are the primary natural resources we need to live—to meet our most basic needs. Water is tied to soil through watersheds. A watershed is all the land drained by a single network of streams and lakes. We all live in a watershed; here in the Great Lakes Basin, we are in one of the mightiest watersheds on Earth, with 18 percent of the world's surface freshwater.

Unchecked surface runoff from rain or snow can devastate a watershed. Soils can wash away, permanently degrading the land. For example, if you remove ground cover from 90 percent of the land, 73 percent of the rainfall will run off, carrying away more than 5 tons of soil per acre per year.

But not in forests. Forest soils soak up water like sponges, letting it percolate into groundwater to recharge streams and maintain an even year-round flow. Some of you have probably seen thunderstorms over backcountry forests; you might have noticed that the streams barely changed. Even in heavy downpours, forests keep runoff and soil loss to a minimum.

History is littered with civilizations that abused their forests and suffered. The bare, rocky hills of Greece were once covered with lush forests. Then people cut down the forests for fuel and agricultural land. The land, deforested and degraded, lost its ability to hold soil and water. Eventually, the people could no longer eke out a living on the land. Social and economic disruption followed, and Greece lost its prominence in the ancient world. Similar vicious cycles threaten many parts of the world today.

In fact, similar cycles threatened parts of the United States not so very long ago. Fortunately, we had people of vision, conservation leaders like Theodore Roosevelt and Gifford Pinchot, who saw the wisdom of setting aside the forested lands on our Nation's headwaters, thereby creating

our National Forest System. Watershed management is the oldest and highest calling of the Forest Service. It is explicitly stated in the purpose of our Federal forests, according to the Organic Act of 1897, “To improve and protect the forest within the boundaries, or *for the purpose of securing favorable conditions of water flows*, and to furnish a continuous supply of timber.”

For too long, timber harvest eclipsed watershed protection at the core of the Forest Service mission. A decade or more ago, we began restoring the balance envisioned by the founders of the National Forest System. That’s why, 3 years ago, we created our Natural Resource Agenda for the 21st Century. Our agenda has four overarching priorities:

- Watershed health and restoration;
- Ecologically sustainable forest and grassland management;
- Recreation opportunities for all Americans; and
- A sound system of forest roads, including protection for roadless areas.

Our Natural Resource Agenda reaffirms our commitment to our roots, our commitment to caring for the land, our commitment to serving people, our commitment to sustainability, our commitment to conservation. To meet our commitments, our first priority must be watershed health. Consider:

- More than 60 million Americans get their drinking water from watersheds that originate on our national forests and grasslands. More than 3,400 communities in 33 States rely on our national forestlands for their drinking water.
- In the Pacific Northwest, 38 percent of the entire runoff is from national forestland; in California, it’s 45 percent. Most of the water that flows into San Francisco Bay originated on a national forest.
- More than half of the Nation’s blue-ribbon trout streams are on our national forests.
- One hundred eighty-one of the 327 watersheds identified by The Nature Conservancy as critical for the conservation of biodiversity in the United States are on our national forests and grasslands.
- The *marginal* value of water on national forestlands is more than \$3.7 billion per year. This \$3.7 billion does not include the value of maintaining fish and wildlife or the savings to municipalities from reduced filtration costs. Nor does it account for the millions of visitor-days when people find fulfillment on a cool, clear stream or lake.

Our national forests and grasslands are the single largest and most important water provider in the United States. Healthy watersheds that produce high-quality water also produce a sustained yield of other goods, values, and services: wood products, recreation opportunities, habitat for fish and wildlife, and much more. Given the fundamental importance of water to all life, healthy watersheds are the basic measure of our mission to care for the land and serve people.

## National Fire Plan

Watershed health is at the core of all we do. Take our National Fire Plan, for example. Motivated by the severity of this fire season, Congress passed and the President signed a bill to increase our fiscal year 2001 funding by \$1.1 billion to better manage fire for the health of our communities and environment. Few periods in our history have seen such enormous opportunities for growth and positive change, particularly in the area of watershed health.

Such opportunities are rare, but not without risk. Following a similarly severe fire season in 1994, the discussion quickly devolved into a fruitless and controversial debate over salvage logging. Based on conversations with the western governors and congressional leaders, I am hopeful we can avoid similar controversy in the wake of the 2000 fire season.

The growing consensus that we must restore our forests and protect our communities gives us the chance to build a constituency for active management based on ecologically conservative principals. The Forest Service National Leadership Team developed principles to minimize controversy and maximize effectiveness in meeting our restoration and rehabilitation efforts. In the aftermath of this year's fires, we will:

1. Help State and local partners reduce fire risk to homes and private property through programs such as Firewise.
2. Focus rehabilitation on restoring watershed function, including protecting basic soil and water resources, conserving biological communities, and keeping out invasive species.
3. Assign the highest priority for hazardous fuels reduction to communities at risk, readily accessible municipal watersheds, threatened and endangered species habitat, and other important local features where conditions favor uncharacteristically intense fires.
4. Restore healthy, diverse, and resilient ecological systems to minimize uncharacteristically intense fires on a priority watershed basis. Methods may include removal of excess vegetation and dead fuels through thinning, prescribed fire, and other treatments.
5. Focus on achieving a desired future condition on the land, in collaboration with communities, interest groups, and State and Federal partners. Streamline process, maximize effectiveness, use an ecologically conservative approach, and minimize controversy in accomplishing restoration projects.
6. Monitor to evaluate the effectiveness of various treatments in reducing uncharacteristically intense fires and in restoring forest ecosystem health and watershed function.
7. Provide jobs, encourage new stewardship industries, and collaborate with local people, volunteers, the Youth Conservation Corps, service organizations, and others, as appropriate.
8. Focus research on the long-term effectiveness of different restoration and rehabilitation methods to determine the methods most effective in protecting and restoring watershed function and forest health. That includes seeking new uses and markets for byproducts of restoration.

These principles are intended to help us get the maximum amount of rehabilitation and restoration work done with the least amount of controversy. Our priorities for restoration are:

- Protecting homes and communities;
- Protecting accessible municipal water supplies; and
- Protecting threatened and endangered species habitat.

We will not use funding for the National Fire Plan to put up new commercial timber sales. However, we will use existing timber sale funding, as appropriate, to help restore healthy forest ecosystems. We will use service contracts, volunteers, the Youth Conservation Corps, Forest Service work crews, and others to help accomplish our land health objectives. In the process, we will provide thousands of new jobs; new, locally based, sustainable stewardship industries; and wood products as a byproduct of accomplishing our land health objectives.

Our first priority will be to work with willing landowners through programs such as Firewise to reduce hazardous fuels and create defensible spaces around homes. The single most important thing a homeowner can do to keep safe from wildland fire is to take such measures as clearing vegetation within 30 to 100 feet from their homes. This is an arena where we can move quickly and without controversy to protect homes and private property. It will be our highest priority.

### **Managing Uncertainty**

We will be smart in how we spend the new appropriations. The surest way to lose future funding for the National Fire Plan is to propose projects that are certain to engender controversy and conflict. We must focus initial treatment on areas where risks to communities are greatest and where the risk of unintended adverse effects on wildland values is least. Restoration involving roadless areas, road construction, or old-growth forests will not be a priority unless it is determined that the land's condition places a community at risk of uncharacteristic fire effects.

We know that thinning can help reduce the risks of crown fires. We are not as certain about the effects of thinning and other mechanical treatments on forest values such as clean water, soil stability, and habitat for wildlife and fish. The fact is, we have a lot to learn. We do not have all the answers. We will temper the imperative of ramping up restoration activities with prudence. We all know of cases where well-intended stewardship projects produced unintended effects that actually further compromised land health.

In short, we will strike a balance between aggressive action and intelligent caution. We will make certain that we thoroughly document the results of our efforts and learn about what works, what doesn't, and why. We will tell Congress and the American people what we learn, even—perhaps especially—about projects that might not work as intended. We know that this is our chance to perform, to put our best foot forward for the health of the lands we manage and the communities we serve.

## Old Growth

I met the other day with John Dillon, the Chairman of International Paper. Two of the issues we discussed were old-growth forests and roadless areas. We agreed that, for too long, we have allowed the issues of old-growth forests and roadless areas to serve as poster children for both sides of the conflict industry.

In the United States, most forests that are late successional, old growth, ancient—whatever your favorite moniker is—are found on national forests. We ought to celebrate the fact that national forests serve as a reservoir for old-growth forests and the values associated with these forests, values such as biodiversity. In the not-so-distant past, these old trees were viewed as “decadent.” Today, we recognize the incredibly unique contribution of national forests to maintaining and expanding the habitat and values provided by old-growth forests.

Our management objectives within these forests should focus on maintaining and enhancing old-growth values and old-growth characteristics. I can anticipate what our critics might charge—that by protecting these forests, we are abandoning our commitment to multiple use and active management. In fact, the opposite is true. John Dillon and I discussed the immense opportunity we have to demonstrate how active management—prescribed fire, along with thinning and other mechanical treatments—can enhance forest ecosystem health and resiliency in fire-adapted forests where fire has been excluded. More than 50 million acres of forests and grasslands are at risk of uncharacteristically intense fires that can threaten communities, water quality, soils, and habitats. This is where we must focus our work.

What we *do not* need to do is harvest old-growth trees to accomplish our restoration objectives. In some cases, when old-growth resources and values are threatened by the risk of uncharacteristically intense fire, we might choose to carefully thin and burn understory vegetation while leaving older, larger trees standing. We will protect and enhance these ecologically sensitive areas and focus restoration on the already roaded and managed portions of the landscape where present conditions might pose a risk to communities, accessible municipal watersheds, or threatened and endangered species habitat.

## Sustainable Forest Ecosystems

Healthy watersheds are the key to sustainable forest management. By managing our forests for stable, productive soils and plentiful supplies of clean water, we can sustain a steady flow of forest products, including timber.

Timber harvest continues to have a firm place on our national forests. Although we might satisfy our Nation’s appetite for wood fiber through more imports, we would then run the risk of shifting more of our environmental problems to other countries. Consider softwood imports from Canada. Between 1991 and 1996, softwood harvest on our national forests fell from about 9 to 3.1 billion board feet per year. Over the same period, U.S. softwood imports from Canada rose from 11.5 to nearly 18 billion board feet per year. Canada now accounts for 34 percent of the softwood lumber consumption in the United States, up from 26 percent in 1990. Much of the

additional lumber has come from old-growth boreal forests in northern Quebec, feeding controversy over old-growth timber harvests in Canada.

The Forest Service is tackling the problem on two fronts: supply and demand. On the supply side, we are committed to ongoing timber sales, as long as they are soundly planned to conserve forest ecosystem health or to enhance ecosystem restoration. In fiscal year 1999, we maintained 5.2 billion board feet of timber under contract.

On the demand side, we are promoting initiatives to reduce wasteful consumption. For example, we are developing technical and scientific information to guide more intelligent consumption choices in the United States; and our Forest Products Laboratory is finding imaginative ways to utilize our natural resources, such as the small trees that currently have little or no market value and that often fuel our worst fires.

Our initiatives do produce results. For example, we are finally on the way to solving a pressing national problem for our rural citizens. For too long, timber harvests on the national forests were tied to the funds counties received for schools and roads. If we reduced timber sales to protect watershed health, we placed our rural citizens at risk of receiving fewer county services. For years, the Forest Service has proposed abolishing this perverse incentive to degrade the health of the land. Our efforts finally paid off: For fiscal year 2001, Congress has authorized hundreds of millions of dollars in new funding over the next 5 years to stabilize payments to counties for schools and roads, regardless of timber harvest levels.

### **Recreation Agenda**

Again, let me stress: Watershed health is at the core of all we do. Take our National Recreation Agenda, for example.

In recent decades, outdoor recreation in the United States has grown into a major industry. Today, recreation dwarfs all other uses of our national forests and grasslands. In 1946, our national forests hosted just 18 million visitor-days; last year, it was nearly 1 billion—that's 50 times more! People are coming from all over the world. They come to enjoy our 7,700 miles of national scenic byways. They come to fish and canoe our 4,348 miles of national wild and scenic rivers. They come to hike our 133,087 miles of trails, to use our 4,300 campsites—the list goes on and on. Our national forests and grasslands are the Nation's premier provider of dispersed recreation opportunities. And that's as it should be—through our Natural Resource Agenda, we are committed to providing all Americans with rich opportunities for outdoor recreation on their national forests and grasslands.

But increasing numbers of visitors can strain the health of our watersheds. Three-quarters of our Nation's outdoor recreation occurs within half a mile of a stream or water body. The Forest Service faces daunting challenges in meeting visitor expectations for enjoyable access to a wide variety of recreational activities while conserving the high quality of the wildland experience—the very thing our visitors come for. Our primary obligation is to make sure that growing recreational use in no way compromises public safety or the health of the land.

To meet the challenge, we drafted an agenda based on a series of public meetings around the country. People came from all over—ordinary folks who cherish their public lands, along with folks from environmental groups and the recreation industry. We invited everyone to comment in writing, if they wished—and many did.

Our agenda will guide Forest Service recreation programs into the 21st century. It will help us live within the limits of the land while increasing visitor satisfaction and fostering a new understanding of our public lands. Partnership is key: We will prioritize projects based on feedback from our partners and local communities, in accordance with sound science. We will also improve our customer service, expand our conservation education and interpretation, and build community relationships and partnerships.

## **Watershed Projects**

Partnerships are the key to maintaining and restoring watershed health. Watersheds can be huge—take the Mississippi River watershed, for example. But even our smallest watersheds often span multiple ownerships. In the Appalachians, for example, valleys are commonly private farm- and pastureland, whereas ridges are often public forestland. What we do on our uplands affects the health of our bottomlands, and vice versa.

Protecting watersheds means cooperation—working together to restore our lands and waters. At the Forest Service, we call this collaborative stewardship; but it's really just plain commonsense. We simply cannot meet the needs of present or future generations without first sustaining the health of the land. And we can't sustain the health of the land without working together across ownerships to restore healthy watersheds.

Here are some of the ways we are working with partners to promote watershed health across ownerships:

- In the next few years, we will be revising more than 60 percent of our national forest plans. Our revised forest plans will all be integrated with watershed assessments across all ownerships to include clear goals for watershed management and restoration.
- The Forest Service is part of the collaborative framework under the Great Lakes Water Quality Agreement between Canada and the United States. The two countries agreed to work together to control pollution in the Great Lakes and to clean up wastewaters from industries and communities. The agreement covers the entire 95,000 square miles of the Great Lakes Basin and affects 35 million citizens, Canadian and U.S.
- Through our Unified Federal Policy, the Forest Service is working with Federal partners across jurisdictional boundaries on a watershed basis to prevent and reduce water pollution that originates on Federal lands or stems from Government activities.
- In fiscal year 2000, the Forest Service invested \$18.5 million in 12 watershed restoration projects across the United States. Our Federal, State, tribal, and private partners put up about \$18 million in matching funds. The projects range from the 3-million-acre Blue Mountain Demonstration Area in Oregon to the multistate Chesapeake Bay Watershed Partnership in the mid-Atlantic region.

## A New Land Governance

Our collaborative watershed projects represent a new type of land governance. At one time, we would spread out a map and plan a wilderness area here, a clearcut there, a road here, a recreation area there. We carved up the landscape according to multiple uses, which is what we thought we were supposed to do. We failed to think on a landscape level—we overlooked the biotic whole.

Today, we know that we must do more. We cannot simply preserve our national parks and wilderness and by extension protect our natural resource heritage. We cannot manage national forests in isolation from other lands and resources, whether State, Federal, or private. We must work in partnership with others to link our neighborhood creeks and our tree-lined streets to our sea-bound rivers, to our State and national parks and forests.

I'll close by quoting Aldo Leopold: "The hope of the future lies not in curbing the influence of human occupancy—it is already too late for that—but in creating a better understanding of the extent of that influence and a new ethic for its governance." Our only hope is to work together across ownerships to understand what we have done to the land and how we can restore it to health.

The key is water. Everyone needs water. Everyone needs clean water and all the benefits that flow from it. Watersheds are the barometers of the health of the land. By focusing on areas of agreement such as water quality improvement, maintaining stream flows, and allowing for the ecological processes that make for healthy forests, we can bring people together to restore the soil, water, and air upon which we and future generations will depend. So please: Go home and write about water.

# Healthy Watersheds for Healthy Lands and Communities

Chief Mike Dombeck, USDA Forest Service  
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Conference  
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5. Focus on achieving a desired future condition on the land, in collaboration with communities, interest groups, and State and Federal partners. Streamline process, maximize effectiveness, use an ecologically conservative approach, and minimize controversy in accomplishing restoration projects.
6. Monitor to evaluate the effectiveness of various treatments in reducing uncharacteristically intense fires and in restoring forest ecosystem health and watershed function.
7. Provide jobs, encourage new stewardship industries, and collaborate with local people, volunteers, the Youth Conservation Corps, service organizations, and others, as appropriate.
8. Focus research on the long-term effectiveness of different restoration and rehabilitation methods to determine the methods most effective in protecting and restoring watershed function and forest health. That includes seeking new uses and markets for byproducts of restoration.

These principles are intended to help us get the maximum amount of rehabilitation and restoration work done with **the least amount of controversy**. Our priorities for restoration are:

- Protecting homes and communities;
- Protecting accessible municipal water supplies; and
- Protecting threatened and endangered species habitat.

We will not use funding for the National Fire Plan to put up new commercial timber sales. However, we will use existing timber sale funding, as appropriate, to help restore healthy forest ecosystems. We will use service contracts, volunteers, the Youth Conservation Corps, Forest Service work crews, and others to help accomplish our land health objectives. In the process, we will provide thousands of new jobs; new, locally based, sustainable stewardship industries; and wood products as a byproduct of accomplishing our land health objectives.

Our first priority will be to work with willing landowners through programs such as Firewise to reduce hazardous fuels and create defensible spaces around homes. The single most important thing a homeowner can do to keep safe from wildland fire is to take such measures as clearing vegetation within 30 to 100 feet from their homes. This is an arena where we can move quickly and without controversy to protect homes and private property. It will be our highest priority.

## Managing Uncertainty

We will be smart in how we spend the new appropriations. The surest way to lose future funding for the National Fire Plan is to propose projects that are certain to engender controversy and conflict. We must focus initial treatment on areas where risks to communities are greatest and where the risk of unintended adverse effects on wildland values is least. Restoration involving roadless areas, road construction, or old-growth forests will not be a priority unless it is determined that the land's condition places a community at risk of uncharacteristic fire effects.

We know that thinning can help reduce the risks of crown fires. We are not as certain about the effects of thinning and other mechanical treatments on forest values such as clean water, soil stability, and habitat for wildlife and fish. The fact is, we have a lot to learn. We do not have all the answers. We will temper the imperative of ramping up restoration activities with prudence. We all know of cases where well-intended stewardship projects produced unintended effects that actually further compromised land health.

In short, we will strike a balance between aggressive action and intelligent caution. We will make certain that we thoroughly document the results of our efforts and

learn about what works, what doesn't, and why. We will tell Congress and the American people what we learn, even—perhaps especially—about projects that might not work as intended. We know that this is our chance to perform, to put our best foot forward for the health of the lands we manage and the communities we serve.

## Old Growth

I met the other day with John Dillon, the Chairman of International Paper. Two of the issues we discussed were old-growth forests and roadless areas. We agreed that, for too long, we have allowed the issues of old-growth forests and roadless areas to serve as poster children for both sides of the conflict industry.

In the United States, most forests that are late successional, old growth, ancient—whatever your favorite moniker is—are found on national forests. We ought to celebrate the fact that national forests serve as a reservoir for old-growth forests and the values associated with these forests, values such as biodiversity. In the not-so-distant past, these old trees were viewed as “decadent.” Today, we recognize the incredibly unique contribution of national forests to maintaining and expanding the habitat and values provided by old-growth forests.

Our management objectives within these forests should focus on maintaining and enhancing old-growth values and old-growth characteristics. I can anticipate what our critics might charge—that by protecting these forests, we are abandoning our commitment to multiple use and active management. In fact, the opposite is true. John Dillon and I discussed the immense opportunity we have to demonstrate how active management—prescribed fire,

along with thinning and other mechanical treatments—can enhance forest ecosystem health and resiliency in fire-adapted forests where fire has been excluded. More than 50 million acres of forests and grasslands are at risk of uncharacteristically intense fires that can threaten communities, water quality, soils, and habitats. This is where we must focus our work.

What we *do not* need to do is harvest old-growth trees to accomplish our restoration objectives. In some cases, when old-growth resources and values are threatened by the risk of uncharacteristically intense fire, we might choose to carefully thin and burn understory vegetation while leaving older, larger trees standing. We will protect and enhance these ecologically sensitive areas and focus restoration on the already roaded and managed portions of the landscape where present conditions might pose a risk to communities, accessible municipal watersheds, or threatened and endangered species habitat.

## Sustainable Forest Ecosystems

Healthy watersheds are the key to sustainable forest management. By managing our forests for stable, productive soils and plentiful supplies of clean water, we can sustain a steady flow of forest products, including timber.

Timber harvest continues to have a firm place on our national forests. Although we might satisfy our Nation's appetite for wood fiber through more imports, we would then run the risk of shifting more of our environmental problems to other countries. Consider softwood imports from Canada. Between 1991 and 1996, softwood harvest on our national forests fell from about 9 to 3.1 billion board feet per year. Over the same period, U.S. softwood imports from Canada rose from 11.5 to nearly 18 billion board feet per year. Canada now accounts for 34 percent of the softwood lumber consumption in the United States, up from 26 percent in 1990. Much of the additional lumber has come from old-growth boreal forests in northern Quebec, feeding controversy over old-growth timber harvests in Canada.

The Forest Service is tackling the problem on two fronts: supply and demand. On the supply side, we are committed to ongoing timber sales, as long as they are soundly planned to conserve forest ecosystem health or to enhance ecosystem restoration. In fiscal year 1999, we maintained 5.2 billion board feet of timber under contract.

On the demand side, we are promoting initiatives to reduce wasteful consumption. For example, we are developing technical and scientific information to guide more intelligent consumption choices in the United States; and our Forest Products Laboratory is finding

imaginative ways to utilize our natural resources, such as the small trees that currently have little or no market value and that often fuel our worst fires.

Our initiatives do produce results. For example, we are finally on the way to solving a pressing national problem for our rural citizens. For too long, timber harvests on the national forests were tied to the funds counties received for schools and roads. If we reduced timber sales to protect watershed health, we placed our rural citizens at risk of receiving fewer county services. For years, the Forest Service has proposed abolishing this perverse incentive to degrade the health of the land. Our efforts finally paid off: For fiscal year 2001, Congress has authorized hundreds of millions of dollars in new funding over the next 5 years to stabilize payments to counties for schools and roads, regardless of timber harvest levels.

## **Recreation Agenda**

Again, let me stress: Watershed health is at the core of all we do. Take our National Recreation Agenda, for example.

In recent decades, outdoor recreation in the United States has grown into a major industry. Today, recreation dwarfs all other uses of our national forests and grasslands. In 1946, our national forests hosted just 18 million visitor-

days; last year, it was nearly 1 billion—that's 50 times more! People are coming from all over the world. They come to enjoy our 7,700 miles of national scenic byways. They come to fish and canoe our 4,348 miles of national wild and scenic rivers. They come to hike our 133,087 miles of trails, to use our 4,300 campsites—the list goes on and on. Our national forests and grasslands are the Nation's premier provider of dispersed recreation opportunities. And that's as it should be—through our Natural Resource Agenda, we are committed to providing all Americans with rich opportunities for outdoor recreation on their national forests and grasslands.

But increasing numbers of visitors can strain the health of our watersheds. Three-quarters of our Nation's outdoor recreation occurs within half a mile of a stream or water body. The Forest Service faces daunting challenges in meeting visitor expectations for enjoyable access to a wide variety of recreational activities while conserving the high quality of the wildland experience—the very thing our visitors come for. Our primary obligation is to make sure that growing recreational use in no way compromises public safety or the health of the land.

To meet the challenge, we drafted an agenda based on a series of public meetings around the country. People came from all over—ordinary folks who cherish their public lands, along with folks from environmental groups and

the recreation industry. We invited everyone to comment in writing, if they wished—and many did.

Our agenda will guide Forest Service recreation programs into the 21st century. It will help us live within the limits of the land while increasing visitor satisfaction and fostering a new understanding of our public lands.

Partnership is key: We will prioritize projects based on feedback from our partners and local communities, in accordance with sound science. We will also improve our customer service, expand our conservation education and interpretation, and build community relationships and partnerships.

## Watershed Projects

Partnerships are the key to maintaining and restoring watershed health. Watersheds can be huge—take the Mississippi River watershed, for example. But even our smallest watersheds often span multiple ownerships. In the Appalachians, for example, valleys are commonly private farm- and pastureland, whereas ridges are often public forestland. What we do on our uplands affects the health of our bottomlands, and vice versa.

Protecting watersheds means cooperation—working together to restore our lands and waters. At the Forest Service, we call this collaborative stewardship; but it's

really just plain commonsense. We simply cannot meet the needs of present or future generations without first sustaining the health of the land. And we can't sustain the health of the land without working together across ownerships to restore healthy watersheds.

Here are some of the ways we are working with partners to promote watershed health across ownerships:

- In the next few years, we will be revising more than 60 percent of our national forest plans. Our revised forest plans will all be integrated with watershed assessments across all ownerships to include clear goals for watershed management and restoration.
- The Forest Service is part of the collaborative framework under the Great Lakes Water Quality Agreement between Canada and the United States. The two countries agreed to work together to control pollution in the Great Lakes and to clean up wastewaters from industries and communities. The agreement covers the entire 95,000 square miles of the Great Lakes Basin and affects 35 million citizens, Canadian and U.S.
- Through our Unified Federal Policy, the Forest Service is working with Federal partners across jurisdictional boundaries on a watershed basis to

prevent and reduce water pollution that originates on Federal lands or stems from Government activities.

- In fiscal year 2000, the Forest Service invested \$18.5 million in 12 watershed restoration projects across the United States. Our Federal, State, tribal, and private partners put up about \$18 million in matching funds. The projects range from the 3-million-acre Blue Mountain Demonstration Area in Oregon to the multistate Chesapeake Bay Watershed Partnership in the mid-Atlantic region.

## A New Land Governance

Our collaborative watershed projects represent a new type of land governance. At one time, we would spread out a map and plan a wilderness area here, a clearcut there, a road here, a recreation area there. We carved up the landscape according to multiple uses, which is what we thought we were supposed to do. We failed to think on a landscape level—we overlooked the biotic whole.

Today, we know that we must do more. We cannot simply preserve our national parks and wilderness and by extension protect our natural resource heritage. We cannot manage national forests in isolation from other lands and resources, whether State, Federal, or private. We must work in partnership with others to link our neighborhood

creeks and our tree-lined streets to our sea-bound rivers, to our State and national parks and forests.

I'll close by quoting Aldo Leopold: "The hope of the future lies not in curbing the influence of human occupancy—it is already too late for that—but in creating a better understanding of the extent of that influence and a new ethic for its governance." Our only hope is to work together across ownerships to understand what we have done to the land and how we can restore it to health.

The key is water. Everyone needs water. Everyone needs clean water and all the benefits that flow from it.

Watersheds are the barometers of the health of the land. By focusing on areas of agreement such as water quality improvement, maintaining stream flows, and allowing for the ecological processes that make for healthy forests, we can bring people together to restore the soil, water, and air upon which we and future generations will depend. So please: Go home and write about water.

*Donna  
Speech file  
MM*

OPENING REMARKS BY  
MIKE DOMBECK

at  
Cultural Diversity Training  
For  
Managers and Supervisors

*Incredible year*  
Monday & Tuesday, October 30 and 31, 2000  
*25/01*  
8:30 AM

*White House*  
Rosslyn West Park Hotel  
Arlington, Virginia

- Good Morning. It is wonderful to begin this day with so many of the leaders in this great organization.
- What brings us together this morning is essential to good stewardship, and to the future of our organization— **Diversity**.
- **Diversity**, as it relates to our human resources and valuing diversity enough to want it, and make it work in our organization.
- People differences are our strength and these differences are what diversity is all about.
- Some progress has been made in increasing the diversity of our work force, but we have significant work to do in creating a work force that reflects the diversity of our society and the public we serve.

*Books  
People  
Planning Rep  
Jobs Management  
Budget*  
1,500 employees  
3,500

*People on the  
delivery system  
on the job  
in the lab  
in the  
office*

- We must continue to aggressively move ahead with our efforts to **eliminate the under-representation** which now exists.
- Some outstanding leaders have brought this Agency to where it is today. Many of them were selected based on excellence in technical areas. However, today, **we are placing equal emphasis on people skills when selecting our leaders.**

### Communications

- Therefore, I firmly believe that it is important to provide continual education - such as the training this morning.
- Managing a work force with over 30,000 employees is challenging for each of us sitting in this room this morning. We have a moral obligation and legal responsibility to continue to build a self-respecting, productive and motivated work environment that is inclusive, while valuing each other as individuals.
- We need to be mindful of how we make decisions, prudent in the use of our resources, and be more accountable for how each of us manage workplace concerns.
- More importantly is how we react and respond to those workplace concerns. **Our future depends on your actions in caring for our human resources.**

- I am asking each of you to **embrace** this *learning opportunity*. Take today's information and the techniques you acquire in this workshop---- use them to lead our organization into one that values the principles of equality, fairness, and justice for all.
- Have a great morning!

We must work to each others strengths  
If we value each others differences, whatever  
each of us brings to the table. Then  
Diversity become a strength.

## North American Forest Management: Looking Forward into the 21<sup>st</sup> Century

by Mike Dombeck and Alex Moad

Predicting the future is a risky business. This is as true for forests and forest management as it is for other biomes and human endeavors. Perhaps more so, since the fate of forests is so strongly influenced by external forces such as population and consumption trends, changes in agricultural technology, and prevailing social attitudes towards nature, recreation and landscape esthetics. In North America, these influences are further complicated by enormous variation in forest type (ranging from the boreal forests of Alaska and northern Canada to the tropical forests of southern Mexico), ownership (federal, state and local governments; private industry and smallholders; and communal and tribal organizations), and levels of economic development. Nevertheless, it should be possible to glean enough information from current trends to make at least some broad predictions about how North American forests and forest management will fare in the first half of the 21<sup>st</sup> century.

Perhaps the most pronounced change in North American forest management over the next several decades will be a continuation of the dramatic shift in public perception concerning the value and appropriate uses of forests. In particular, publicly owned, natural forests will become increasingly valued for the environmental services they provide, instead of just their wood and other forest product values. In other words, people will increasingly see the trees for the forest, rather than the other way round.

Principal among these environmental services is the provision of clean, reliable water. Water is and will surely remain one of the most important products of forests throughout North America, essential not only for irrigated agriculture in the western United States and northern Mexico, but also for industrial and residential use throughout the continent. In fact, the National Forests in the United States were created in large part to reverse the deterioration of watersheds during the 1800s and restore them to health, a process that occupied much of the first half of the 20<sup>th</sup> century. Today, these forests encompass some 3,400 watersheds that provide drinking water for over 60 million people. As the economy of Mexico continues to diversify and expand, thousands of growing municipalities will depend on water flowing from forested lands for both domestic and industrial use.

Additional environmental services that are almost certain to experience greater demand in the coming decades, and which are fully compatible with watershed protection, include recreation, biodiversity conservation and carbon sequestration. Forest-based recreation, already a high priority in much of North America, is likely to become even more important throughout the region as per capita productivity rises and leisure time increases in all countries, and the urban middle class continues to grow in Mexico. As species continue to be lost worldwide, all forests, including those of North America, will become increasingly valued as reservoirs of biodiversity. Much of this focus will likely continue to center on the species-rich forests of southern Mexico and Mesoamerica. But it also will be an important factor in temperate forest management, as witnessed by current

efforts to modify forest management practices along the west coast of the U.S. and Canada to protect wild salmon populations. Finally, as the effects of global climate change become more apparent, the role of forests as both carbon sinks and moderators of climatic disturbance (such as flooding) will take on a new meaning, with commensurate implications for management objectives. These include not only the inclusion of carbon sequestration as an additional goal in multiple-purpose forest management on public lands, but also specific reforestation and forest protection projects on private lands in response to incentives provided by carbon markets.

In order to increase the role of environmental services in forest management, at least three fundamental changes in North American forest management practices will be necessary. Firstly, substantial cost and effort will be required to restore North American forests to ecological health. This is particularly true in the western U.S., where a combination of extensive harvesting and fire prevention, however well intentioned, has unfortunately led to undesirable changes in species composition, stand structure and fuel loads, leaving many forests vulnerable to uncharacteristically intense fires and disease spread. Similar, although perhaps less severe, challenges face Canada and Mexico.

Secondly, the widespread adoption of innovative mechanisms that adequately reflect the full value of environmental services in public policy making and market structures will be needed. The environmental services of forests traditionally have been treated as a "free good," with inadequate recognition of their true value or the costs associated with maintaining them. Only when these services are lost do we realize their full value. For example, healthy, functioning watersheds save local communities throughout North America billions of dollars in water filtration costs. New York City recently decided to invest \$1.5 billion in watershed management, including reforestation of slopes and riparian strips, as an alternative to paying up to \$8 billion for new water treatment plants. To correct the problem of undervalued environmental services, it is likely that such market-based practices as conservation easements, carbon trading and "true cost" pricing of water, recreation and hydroelectric power will become more common.

Thirdly, increased attention will need to be given to the social dimensions of forest management. As managers adapt to changes in public attitudes towards and uses of forests, improvements in social research will be needed to clarify social priorities and better understand human interactions with forests. For example, recreational use in National Forests in the U.S. has grown from less than 20 million person-days in 1950 to almost a billion person-days today, yet insufficient effort has been given to understanding the nature and management implications of this dramatic shift in forest use. As appreciation for the importance of social and institutional arrangements grows among forest managers, it is likely that new approaches will be adopted to insure transparency and public involvement in decision-making. Criteria and indicators of sustainability at both the national (e.g., the Montreal Process) and management unit (e.g., certification) levels, the devolution of decision-making to local institutions, and innovative approaches to public-private partnerships are just a few examples of possible means of improving transparency and public involvement in forest management. Finally, in response to need to manage forests on a landscape scale, new mechanisms will be developed for voluntary

coordination of land management across ownership boundaries, including international borders. The presence of Mexican and Canadian firefighters in the U.S. during the severe fires of 2000, as well as similar assistance to both countries by the U.S. in recent years is testimony to possibilities of increased international cooperation in North America.

None of the above discussion should be taken to imply that North American forests will cease to be important sources of timber, fiber and other commercial products. To the contrary, it is probable that North American wood and fiber production will increase in the next few decades in response to overall domestic and international demand, which is likely to grow despite product substitution effects. However, it is likely that this production will increasingly be concentrated on privately owned plantation forests that are specifically dedicated to fiber production, rather than on publicly owned, natural forests. There are several reasons for this trend, already much in evidence, to continue. Among them is the reduction of harvesting on publicly held lands due to the depletion of commercially available stocks and public concerns regarding the compatibility of logging and environmental services. In addition, the introduction of new, fast-growing hybrid trees adapted to a wider range of growing environments will both help to increase the comparative economic advantage of plantation-grown wood and extend its range to new areas.

This does not mean that commercial harvesting will necessarily disappear in natural forests during the coming decades. Carefully regulated harvesting is likely to be an important tool for managing forests for multiple benefits (including restoring them to health) for decades to come. In fact, one of our priorities will be to find new means of utilizing small diameter wood as part of the process of restoring ecological health to western forests with high fuel loads. And small, family-owned forest plots throughout the region, particularly in the northeast and in the tropics, likely will continue to be managed for high-value wood products, among other objectives. But high-volume fiber production is likely to shift steadily to plantation production.

In this context, it seems probable that genetically modified organisms will play a revolutionary role in fiber production in the coming decade and beyond. Given the legitimate concerns over the wisdom of creating and deploying genetically modified organisms, especially in wildland habitats, it seems probable that their contribution to fiber production will focus on tree plantations and agricultural crops, combined with new processing technologies for composite materials. Perhaps even more influential will be the impact of genetically modified organisms on forests via the agricultural sector, either through the concentration of crop production and subsequent reforestation of marginal lands, or the extension of modified crops onto lands previously unsuitable for agriculture, or both. Finally, the potential role of genetically modified organisms to either harm forests through the introduction of truly new invasive species, or to benefit them through the reintroduction of such species as the American chestnut and elm, cannot be overlooked.

Predicting the future is a risky business. Far riskier, especially in a field with such a long time horizon as forest ecosystem management, is making no attempt to anticipate the future and prepare for it.

## Approaches to Watershed Restoration and Community Sustainability

Intra

Chief Mike Dombeck, USDA Forest Service

Large-Scale Watershed Restoration Forum

The National Environmental Education & Training Foundation

The Carnegie Endowment for International Peace

November 2, 2000

It's a pleasure to join you here today to discuss the challenges we face in restoring and maintaining healthy lands and communities. I'd like to thank Kevin Coyle of the National Environmental Education & Training Foundation for sponsoring this forum and Gene Lessard for his skill as moderator. I commend the foundation for assisting the Forest Service and its partners in disseminating information and promoting discussion about watershed restoration activities while seeking ways to ensure community sustainability across the country.

This morning, I'd like to briefly address a subject critical to the future of our Nation, critical to our very survival: water. We all require pure, clean water. We need it to drink; to grow our food; to nurture our communities, forests, and rangelands; to maintain a rich variety of fish and wildlife; and to enjoy the many pleasures of life—swimming, fishing, canoeing, boating, sailing, the list goes on and on. At the Forest Service, our first and highest calling is to protect and restore the quality of our Nation's water sources. Over a century ago, it was public concern about adequate supplies of clean water that led to the establishment of federally protected forest reserves. Now, helping to refocus the agency on its original purpose, we have launched a series of collaborative large-scale watershed restoration projects.

## Water Crisis

Earth is called “the water planet,” and for good reason. Seventy percent of the Earth’s surface is covered with water. However, more than 99 percent of the Earth’s water is saltwater or locked up in ice. How much water is annually renewable and available in rivers and lakes for human consumption? Less than 8 ten-thousandths of 1 percent—that’s 0.00008 percent.

This meager amount is unevenly distributed and often poorly managed. Many parts of the world face a water crisis. According to the World Bank:

- 1.3 billion people lack access to adequate supplies of clean drinking water.
- 3 billion people lack sufficient water for sanitation.
- 10,000 people die every day from diseases related to polluted water and poor sanitation.
- Thousands more suffer from debilitating diseases.

In 1991, at the time of the Gulf War, a source in Jordan told the *Washington Post*: “You think we have bad fights over oil. Just wait until we start fighting over water.”

In North America, we like to think we are immune to water wars. After all, we have plenty of water, or so it seems. But large parts of the United States, including some of our fastest growing regions, have limited or declining water supplies.

Consider:

- In California, water is the single most volatile issue statewide—specifically, how much water to divert from the north to the arid south.
- In the arid Southwest, battles are brewing over the waters of the Colorado River. Already, we are draining the Colorado so badly that the wetlands at the river's mouth in Mexico are a sickly remnant of their former splendor.
- On the Great Plains and elsewhere, we are mining our aquifers—there's no other word to describe it. Our largest aquifer, the Ogallala Aquifer, supplies a region from South Dakota to Texas. Since the 1940's, the Ogallala Aquifer has dropped by more than 10 feet, with some areas of Texas losing nearly 100 feet. Aquifers can take thousands of years to recharge. For all practical purposes, once they're gone, that's it.

At the local level for each of the large-scale restoration projects, the scenes and the language of degradation were all too familiar: tainted drinking water; declining fish stocks; damaged and destroyed wetlands; increasing risks from wildfire, insect, and disease infestation; impaired recreation and forest resources; threats to water quality from road failure and intensive agriculture; eroded stream banks, diminished streamside vegetation, degraded fish and wildlife habitat; invasive non-native plants.

### **The National Forests: Our Nation's Headwaters**

You might ask why a Forest Service Chief should care so much about water. When most people think of the 192-million-acre National Forest System, they think of forest products, livestock grazing, mineral extraction, wildlife management,

outdoor recreation, and wilderness experiences. What do forests have to do with water conservation?

Water and soil are the primary natural resources we need to live—to meet our most basic needs. Water is tied to soil through watersheds. A watershed is all the land drained by a single network of streams and lakes. We all live in a watershed; here in the Chesapeake basin, we look out on one of the largest and most productive estuaries in the world.

Unchecked surface runoff from rain or snow can devastate a watershed. Soils can wash away, permanently degrading the land. For example, if you remove ground cover from 90 percent of the land, 73 percent of the rainfall will run off, carrying away more than 5 tons of soil per acre per year.

But not in forests. Forest soils soak up water like sponges, letting it percolate into groundwater to recharge streams and maintain an even year-round flow. Some of you have probably seen thunderstorms over backcountry forests; you might have noticed that the streams barely changed. Even in heavy downpours, forests keep runoff and soil loss to a minimum.

History is littered with civilizations that abused their forests and suffered. The bare, rocky hills of Greece were once covered with lush forests. Then people cut down the forests for fuel and agricultural land. The land, deforested and degraded, lost its ability to hold soil and water. Eventually, the people could no longer eke out a living on the land. Social and economic disruption followed, and Greece lost its prominence in the ancient world. Similar vicious cycles threaten many parts of the world today.

In fact, similar cycles threatened parts of the United States not so very long ago. Fortunately, we had people of vision, conservation leaders like Theodore Roosevelt and Gifford Pinchot, who saw the wisdom of setting aside the forested lands on our Nation's headwaters, thereby creating our National Forest System. Watershed management is the oldest and highest calling of the Forest Service. It is explicitly stated in the purpose of our Federal forests, according to the Organic Act of 1897, "To improve and protect the forest within the boundaries, or *for the purpose of securing favorable conditions of water flows*, and to furnish a continuous supply of timber."

Three years ago, we created our Natural Resource Agenda for the 21st Century. The agenda reaffirms our commitment to our roots, our commitment to caring for the land, our commitment to serving people, our commitment to sustainability, our commitment to conservation. To meet our commitments, our first priority must be watershed health. Consider:

- More than 60 million Americans get their drinking water from watersheds that originate on our national forests and grasslands. More than 3,400 communities in 33 States rely on our national forestlands for their drinking water.
- In the Pacific Northwest, 38 percent of the entire runoff is from national forestland; in California, it's 45 percent. Most of the water that flows into San Francisco Bay originated on a national forest.
- More than half of the Nation's blue-ribbon trout streams are on our national forests.

- One hundred eighty-one of the 327 watersheds identified by The Nature Conservancy as critical for the conservation of biodiversity in the United States are on our national forests and grasslands.
- The *marginal* value of water on national forestlands is more than \$3.7 billion per year. This \$3.7 billion does not include the value of maintaining fish and wildlife or the savings to municipalities from reduced filtration costs. Nor does it account for the millions of visitor-days when people find fulfillment on a cool, clear stream or lake.

Our national forests and grasslands are the single largest and most important water provider in the United States. Healthy watersheds that produce high-quality water also produce a sustained yield of other goods, values, and services: wood products, recreation opportunities, habitat for fish and wildlife, and much more. Given the fundamental importance of water to all life, healthy watersheds are the basic measure of our mission to care for the land and serve people.

### **National Fire Plan**

Watershed health is at the core of all we do. The growing consensus that we must restore our forests and protect our communities gives us the chance to build a constituency for active management based on ecologically conservative principals. The Forest Service National Leadership Team developed principles to minimize controversy and maximize effectiveness in meeting our restoration and rehabilitation efforts. In the aftermath of this year's fires, we will:

1. Help State and local partners reduce fire risk to homes and private property through programs such as Firewise.
2. Focus rehabilitation on restoring watershed function, including protecting basic soil and water resources, conserving biological communities, and keeping out invasive species.
3. Assign the highest priority for hazardous fuels reduction to communities at risk, readily accessible municipal watersheds, threatened and endangered species habitat, and other important local features where conditions favor uncharacteristically intense fires.
4. Restore healthy, diverse, and resilient ecological systems to minimize uncharacteristically intense fires on a priority watershed basis. Methods may include removal of excess vegetation and dead fuels through thinning, prescribed fire, and other treatments.
5. Focus on achieving a desired future condition on the land, in collaboration with communities, interest groups, and State and Federal partners. Streamline process, maximize effectiveness, use an ecologically conservative approach, and minimize controversy in accomplishing restoration projects.
6. Monitor to evaluate the effectiveness of various treatments in reducing uncharacteristically intense fires and in restoring forest ecosystem health and watershed function.
7. Provide jobs, encourage new stewardship industries, and collaborate with local people, volunteers, the Youth Conservation Corps, service organizations, and others, as appropriate.

8. Focus research on the long-term effectiveness of different restoration and rehabilitation methods to determine the methods most effective in protecting and restoring watershed function and forest health. That includes seeking new uses and markets for byproducts of restoration.

These principles are intended to help us get the maximum amount of rehabilitation and restoration work done with the least amount of controversy.

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But increasing numbers of visitors can strain the health of our watersheds. Three-quarters of our Nation’s outdoor recreation occurs within half a mile of a stream or

water body. The Forest Service faces daunting challenges in meeting visitor expectations for enjoyable access to a wide variety of recreational activities while conserving the high quality of the wildland experience—the very thing our visitors come for. Our primary obligation is to make sure that growing recreational use in no way compromises public safety or the health of the land.

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Our agenda will guide Forest Service recreation programs into the 21st century. It will help us live within the limits of the land while increasing visitor satisfaction and fostering a new understanding of our public lands. Partnership is key: We will prioritize projects based on feedback from our partners and local communities, in accordance with sound science. We will also improve our customer service, expand our conservation education and interpretation, and build community relationships and partnerships.

## **Watershed Projects**

Partnerships are the key to maintaining and restoring watershed health. Protecting watersheds means cooperation—working together to restore our lands and waters. At the Forest Service, we call this collaborative stewardship; but it's really just plain commonsense. We simply cannot meet the needs of present or future generations without first sustaining the health of the land. And we can't sustain the

health of the land without working together across ownerships to restore healthy watersheds. Only by collaborating with people who depend on our watersheds for their livelihood, others who cherish the land, and organizations that want to create a vigorous landscape, can teams of partners bring these watersheds back to a vibrant, healthy condition. Americans are expressing their views, working with their neighbors, and achieving the results they want.

Here are some of the ways we are working with partners to promote watershed health across ownerships:

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- The Forest Service is part of the collaborative framework under the Great Lakes Water Quality Agreement between Canada and the United States. The two countries agreed to work together to control pollution in the Great Lakes and to clean up wastewaters from industries and communities. The agreement covers the entire 95,000 square miles of the Great Lakes Basin and affects 35 million citizens, Canadian and U.S.
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Today, we know that we must do more. We cannot simply preserve our national parks and wilderness and by extension protect our natural resource heritage. We cannot manage national forests in isolation from other lands and resources, whether State, Federal, or private. We must work in partnership with others to link our neighborhood creeks and our tree-lined streets to our sea-bound rivers, to our State and national parks and forests. From each river basin, the scenes of recent collaborative restoration are encouraging: cleaner drinking water; increasing fish populations; healthy wetlands; decreasing risks from wildfire, insects, and disease; improved recreation experiences and more productive forests; cleaner water due to road closings and wiser agricultural practices; stream banks protected by trees and other vegetation, providing abundant wildlife habitat; and fewer invasive non-native plants.

I'll close by quoting Aldo Leopold: "The hope of the future lies not in curbing the influence of human occupancy—it is already too late for that—but in creating a better understanding of the extent of that influence and a new ethic for its governance." Our only hope is to work together across ownerships to understand what we have done to the land and how we can restore it to health.

The key is water. Everyone in every community needs water. Everyone needs clean water and all the benefits that flow from it. Watersheds are the barometers of the health of the land. By focusing on areas of agreement such as water quality improvement, maintaining stream flows, and allowing for the ecological processes that make for healthy forests, we can bring people together to restore the soil, water, and air upon which we and future generations will depend.

## Approaches to Watershed Restoration and Community Sustainability

Chief Mike Dombeck, USDA Forest Service

Large-Scale Watershed Restoration Forum

The National Environmental Education & Training Foundation

The Carnegie Endowment for International Peace

November 2, 2000

It's a pleasure to join you here today to discuss the challenges we face in restoring and maintaining healthy lands and communities. I'd like to thank Kevin Coyle of the National Environmental Education and Training Foundation for sponsoring this forum and Gene Lessard for his skill as moderator. I commend the foundation for assisting the Forest Service and its partners in disseminating information and promoting discussion about watershed restoration activities while seeking ways to ensure community sustainability across the country.

This morning, I'd like to briefly address a subject critical to the future of our Nation, critical to our very survival: water. We all require pure, clean water. We need it to drink; to grow our food; to nurture our communities, forests, and rangelands; to maintain a rich variety of fish and wildlife; and to enjoy the many pleasures of life—swimming, fishing, canoeing, boating, sailing, the list goes on and on. At the Forest Service, our first and highest calling is to protect and restore the quality of our Nation's water sources. Over a century ago, it was public concern about adequate supplies of clean water that led to the establishment of federally protected forest reserves. Now, helping to refocus the agency on its original purpose, we have launched a series of collaborative large-scale watershed restoration projects.

### Water Crisis

Earth is called "the water planet," and for good reason. Seventy percent of the Earth's surface is covered with water. However, more than 99 percent of the Earth's water is saltwater or locked up in ice. How much water is annually renewable and available in rivers and lakes for human consumption? Less than 8 ten-thousandths of 1 percent—that's 0.00008 percent.

This meager amount is unevenly distributed and often poorly managed. Many parts of the world face a water crisis. According to the World Bank:

- 1.3 billion people lack access to adequate supplies of clean drinking water.
- 3 billion people lack sufficient water for sanitation.
- 10,000 people die every day from diseases related to polluted water and poor sanitation.
- Thousands more suffer from debilitating diseases.

In 1991, at the time of the Gulf War, a source in Jordan told the *Washington Post*: "You think we have bad fights over oil. Just wait until we start fighting over water."

In North America, we like to think we are immune to water wars. After all, we have plenty of water, or so it seems. But large parts of the United States, including some of our fastest growing regions, have limited or declining water supplies. Consider:

- In California, water is the single most volatile issue statewide—specifically, how much water to divert from the north to the arid south.
- In the arid Southwest, battles are brewing over the waters of the Colorado River. Already, we are draining the Colorado so badly that the wetlands at the river's mouth in Mexico are a sickly remnant of their former splendor.
- On the Great Plains and elsewhere, we are mining our aquifers—there's no other word to describe it. Our largest aquifer, the Ogallala Aquifer, supplies a region from South Dakota to Texas. Since the 1940's, the Ogallala Aquifer has dropped by more than 10 feet, with some areas of Texas losing nearly 100 feet. Aquifers can take thousands of years to recharge. For all practical purposes, once they're gone, that's it.

At the local level for each of the large-scale restoration projects, the scenes and the language of degradation were all too familiar: tainted drinking water; declining fish stocks; damaged and destroyed wetlands; increasing risks from wildfire, insect, and disease infestation; impaired recreation and forest resources; threats to water quality from road failure and intensive agriculture; eroded stream banks, diminished streamside vegetation, degraded fish and wildlife habitat; invasive non-native plants.

### **The National Forests: Our Nation's Headwaters**

You might ask why a Forest Service Chief should care so much about water. When most people think of the 192-million-acre National Forest System, they think of forest products, livestock grazing, mineral extraction, wildlife management, outdoor recreation, and wilderness experiences. What do forests have to do with water conservation?

Water and soil are the primary natural resources we need to live—to meet our most basic needs. Water is tied to soil through watersheds. A watershed is all the land drained by a single network of streams and lakes. We all live in a watershed; here in the Chesapeake basin, we look out on one of the largest and most productive estuaries in the world.

Unchecked surface runoff from rain or snow can devastate a watershed. Soils can wash away, permanently degrading the land. For example, if you remove ground cover from 90 percent of the land, 73 percent of the rainfall will run off, carrying away more than 5 tons of soil per acre per year.

But not in forests. Forest soils soak up water like sponges, letting it percolate into groundwater to recharge streams and maintain an even year-round flow. Some of you have probably seen thunderstorms over backcountry forests; you might have noticed that the streams barely changed. Even in heavy downpours, forests keep runoff and soil loss to a minimum.

History is littered with civilizations that abused their forests and suffered. The bare, rocky hills of Greece were once covered with lush forests. Then people cut down the forests for fuel and agricultural land. The land, deforested and degraded, lost its ability to hold soil and water. Eventually, the people could no longer eke out a living on the land. Social and economic disruption followed, and Greece lost its prominence in the ancient world. Similar vicious cycles threaten many parts of the world today.

In fact, similar cycles threatened parts of the United States not so very long ago. Fortunately, we had people of vision, conservation leaders like Theodore Roosevelt and Gifford Pinchot, who saw the

wisdom of setting aside the forested lands on our Nation's headwaters, thereby creating our National Forest System. Watershed management is the oldest and highest calling of the Forest Service. It is explicitly stated in the purpose of our Federal forests, according to the Organic Act of 1897, "To improve and protect the forest within the boundaries, or *for the purpose of securing favorable conditions of water flows*, and to furnish a continuous supply of timber."

Three years ago, we created our Natural Resource Agenda for the 21st Century. The agenda reaffirms our commitment to our roots, our commitment to caring for the land, our commitment to serving people, our commitment to sustainability, our commitment to conservation. To meet our commitments, our first priority must be watershed health. Consider:

- More than 60 million Americans get their drinking water from watersheds that originate on our national forests and grasslands. More than 3,400 communities in 33 States rely on our national forestlands for their drinking water.
- In the Pacific Northwest, 38 percent of the entire runoff is from national forestland; in California, it's 45 percent. Most of the water that flows into San Francisco Bay originated on a national forest.
- More than half of the Nation's blue-ribbon trout streams are on our national forests.
- One hundred eighty-one of the 327 watersheds identified by The Nature Conservancy as critical for the conservation of biodiversity in the United States are on our national forests and grasslands.
- The *marginal* value of water on national forestlands is more than \$3.7 billion per year. This \$3.7 billion does not include the value of maintaining fish and wildlife or the savings to municipalities from reduced filtration costs. Nor does it account for the millions of visitor-days when people find fulfillment on a cool, clear stream or lake.

Our national forests and grasslands are the single largest and most important water provider in the United States. Healthy watersheds that produce high-quality water also produce a sustained yield of other goods, values, and services: wood products, recreation opportunities, habitat for fish and wildlife, and much more. Given the fundamental importance of water to all life, healthy watersheds are the basic measure of our mission to care for the land and serve people.

### National Fire Plan

Watershed health is at the core of all we do. The growing consensus that we must restore our forests and protect our communities gives us the chance to build a constituency for active management based on ecologically conservative principals. The Forest Service National Leadership Team developed principles to minimize controversy and maximize effectiveness in meeting our restoration and rehabilitation efforts. In the aftermath of this year's fires, we will:

1. Help State and local partners reduce fire risk to homes and private property through programs such as Firewise.
2. Focus rehabilitation on restoring watershed function, including protecting basic soil and water resources, conserving biological communities, and keeping out invasive species.
3. Assign the highest priority for hazardous fuels reduction to communities at risk, readily accessible municipal watersheds, threatened and endangered species habitat, and other

important local features where conditions favor uncharacteristically intense fires.

4. Restore healthy, diverse, and resilient ecological systems to minimize uncharacteristically intense fires on a priority watershed basis. Methods may include removal of excess vegetation and dead fuels through thinning, prescribed fire, and other treatments.
5. Focus on achieving a desired future condition on the land, in collaboration with communities, interest groups, and State and Federal partners. Streamline process, maximize effectiveness, use an ecologically conservative approach, and minimize controversy in accomplishing restoration projects.
6. Monitor to evaluate the effectiveness of various treatments in reducing uncharacteristically intense fires and in restoring forest ecosystem health and watershed function.
7. Provide jobs, encourage new stewardship industries, and collaborate with local people, volunteers, the Youth Conservation Corps, service organizations, and others, as appropriate.
8. Focus research on the long-term effectiveness of different restoration and rehabilitation methods to determine the methods most effective in protecting and restoring watershed function and forest health. That includes seeking new uses and markets for byproducts of restoration.

These principles are intended to help us get the maximum amount of rehabilitation and restoration work done with the least amount of controversy.

### **Recreation Agenda**

Again, let me stress: Watershed health is at the core of all we do. Take our National Recreation Agenda, for example.

In recent decades, outdoor recreation in the United States has grown into a major industry. Today, recreation dwarfs all other uses of our national forests and grasslands. In 1946, our national forests hosted just 18 million visitor-days; last year, it was nearly 1 billion—that's 50 times more! People are coming from all over the world. They come to enjoy our 7,700 miles of national scenic byways. They come to fish and canoe our 4,348 miles of national wild and scenic rivers. They come to hike our 133,087 miles of trails, to use our 4,300 campsites—the list goes on and on. Our national forests and grasslands are the Nation's premier provider of dispersed recreation opportunities. And that's as it should be—through our Natural Resource Agenda, we are committed to providing all Americans with rich opportunities for outdoor recreation on their national forests and grasslands.

But increasing numbers of visitors can strain the health of our watersheds. Three-quarters of our Nation's outdoor recreation occurs within half a mile of a stream or water body. The Forest Service faces daunting challenges in meeting visitor expectations for enjoyable access to a wide variety of recreational activities while conserving the high quality of the wildland experience—the very thing our visitors come for. Our primary obligation is to make sure that growing recreational use in no way compromises public safety or the health of the land.

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Partnerships are the key to maintaining and restoring watershed health. Protecting watersheds means cooperation—working together to restore our lands and waters. At the Forest Service, we call this collaborative stewardship; but it's really just plain commonsense. We simply cannot meet the needs of present or future generations without first sustaining the health of the land. And we can't sustain the health of the land without working together across ownerships to restore healthy watersheds. Only by collaborating with people who depend on our watersheds for their livelihood, others who cherish the land, and organizations that want to create a vigorous landscape, can teams of partners bring these watersheds back to a vibrant, healthy condition. Americans are expressing their views, working with their neighbors, and achieving the results they want.

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*Donna  
Speech file  
m*

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*which Jim Sedell will talk about at length & we will  
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### *Alabama, Georgia – retuning water*

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## Large Scale Watershed Restoration

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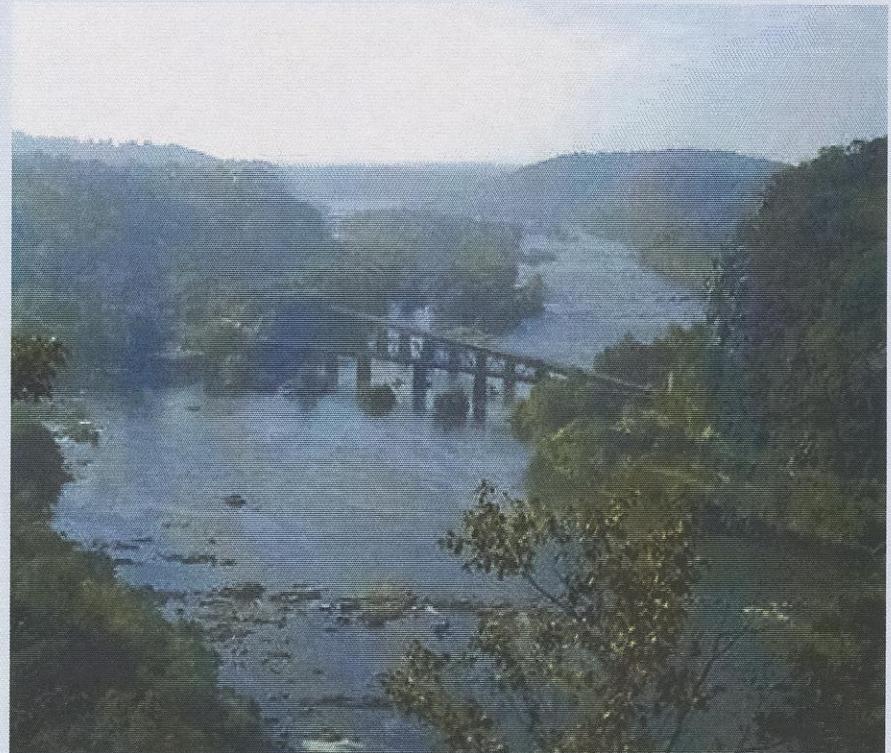
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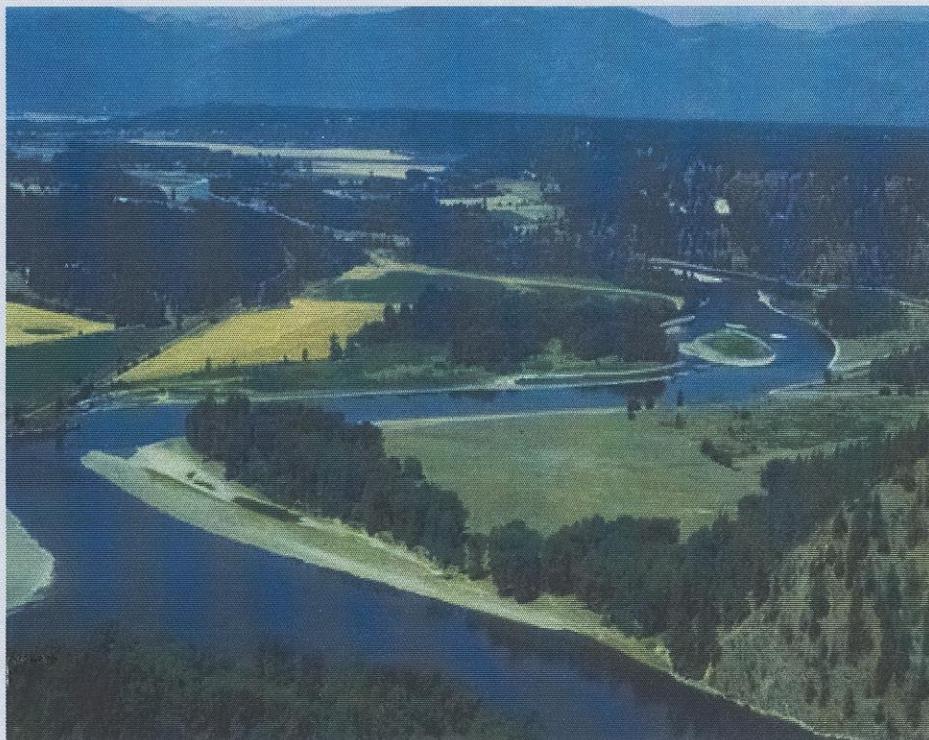
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# Large-Scale Watersheds

Provide a vehicle to communicate to the public how important the private and public forests are to sustaining clean water



# Large-Scale Watersheds Help Integrate Program Delivery for both Public and Private Forests



- Connect urban – rural – wildland
- Connect the forest to the faucet
- Accelerate and focus existing efforts

# Forest Service Chose to be a Catalyst for Action

1. Collaboration and cooperation are essential to good-decision making
2. Only a large-scale watershed approach to restoration and management of resources across ownership boundaries and over time can insure improved resource benefits to all users
3. Power in leveraging scarce resources (people, dollars, and facilities) to accomplish common objectives

*“There are two spiritual dangers in not owning a farm. One is the danger of supposing that breakfast comes from the grocery, and the other that heat comes from the furnace.”*

-- Aldo Leopold

A Sand County Almanac

*“A third is to assume that water just comes from the tap.”*

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Chief, USDA Forest Service