



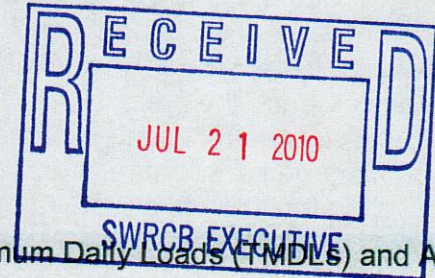
# COUNTY OF SISKIYOU

## COUNTY ADMINISTRATIVE OFFICE

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February 9, 2010

North Coast Regional Water Quality Control Board  
c/o Katharine Carter  
5550 Skylane Blvd, Suite A  
Santa Rosa, CA 95403



Subject: Draft Staff Report for the Klamath River Total Maximum Daily Loads (TMDLs) and Action Plan

Dear Ms. Carter:

Along with other County departments from whom you may hear, as Siskiyou County's Natural Resource Policy Specialist, I have been assigned to assemble and present to the North Coast Regional Water Quality Control Board (Regional Board) various comments pertinent to the proposed Klamath River TMDL and Implementation Plan (TMDL).

The Regional Board is in receipt of comments on the previous draft of the TMDL. Regional Board staff has requested that duplicative comments not be submitted since all comments are part of the same record. I will accede to that request with a note of appreciation for the responsiveness shown to a number of issues raised by the County and others that have been very substantively reflected in the current draft. As well as helping make a better plan, such refinement encourages public participation and contributes greatly to a better working environment for all who are struggling to address the environmental challenges we face.

Perhaps the best way to address the comments I have developed and received is to list the topic and then discuss the issues associated with it. I think this works best because no specific changes are suggested for wording within the TMDL. Rather, they center upon fundamental issues crucial to insuring a workable plan as well as compliance with various federal and state statutes. These are:

### Climate Change

Certainly it must come as some surprise, even shock, that comments related to climate change are coming from a Siskiyou County Department. The County certainly has yet to make any formal policy regarding this topic. However, it is generally regarded as prudent among the various County Departments, especially in light of many California laws now in existence, to address climate change and to be aware of the generally recognized scenarios, particularly those that have a significant amount of empirical support. Prudence further dictates that planning provide for the greatest degree of flexibility to accommodate increased validation of predicted trends.



At the recent four-day Klamath Basin Science Conference, which many of the Regional Board's staff attended, considerable time and effort was devoted to climate change. The last day's plenary session, which unfortunately the Regional Board's staff missed, was almost exclusively devoted to climate change.

The decommissioning of four dams on the Klamath, California's second largest river system, is one of the most challenging environmental projects currently considered in the United States. As such, it has drawn the attention of some of America's top scientific and domestic policy minds. In fact, the project was the primary motivation for the Conference. Given the high-profile, science-rich context of the event, the logical inference can be made that the scientific and management communities view climate change valid and likely enough that it should be incorporated into the decision process.

Dr. Ron Neilson (co-recipient of the 2007 Nobel Peace Prize) currently with the US Forest Service and one of the most renowned and innovative researchers in the field of climate-related biological response, made an extremely compelling presentation for the demonstrable local effects of changing climate trends, their associated natural drivers, and the rather imminent need to incorporate such knowledge into conservation and restoration strategies. I wish Regional Board staff had still been around for this presentation so I wouldn't have to explain something entirely beyond my qualifications. Thus, with all the risk it entails, I must try my best to explain its relevance.

One of the key points of evidence raised by Dr. Neilson, was the upward trend of river temperatures. Most surprising was the Yukon, which is virtually without any anthropogenic temperature-affecting input. I believe an analogy might be drawn to the similar rate of rise in Klamath temperatures. Associated with this phenomenon, is the shift in global wind patterns from zonal to meridional flows. This oscillation is common in the historical record. However, all climate models apparently predict a prolonged if not altogether unprecedented persistence of meridional flows. As well as being characterized by extended periods of relatively high temperature spikes, (as well as cold ones), these meridional periods are also accompanied by prolonged drought broken up by brief periods of extreme precipitation in our region. Below is a brief characterization of the difference between the two flow patterns from a climate website:

When the upper level winds are parallel or nearly parallel to the lines of latitude the wind pattern is termed zonal. When the winds cross the latitude lines at a sharp angle, the wind pattern is termed meridional. In a meridional pattern the jet stream will have highly amplified troughs and ridges. Low-pressure systems tend to move faster (west to east) when associated with a zonal flow. A highly meridional flow can cause atmospheric blocking and spells of much below and much above normal temperatures. A meridional pattern, with its highly curved flow, generates more vorticity than that associated with a zonal flow. Forecasting becomes more challenging when the jet stream has a meridional pattern.

The last zonal flow pattern was around the 1940's thru 1970's which was a typically moderate cool/wet period. My understanding, though I cannot find the specific records, is that sufficiently accurate temperature data collection for the Klamath began around 1940. If so, and if this data



has been incorporated into the "natural receiving temperature" in the Basin Plan and/or temperature guidelines sought for the cold water fisheries (COLD) beneficial use, the periodicity of the zonal/meridional influence may be unaccounted for in more than one key area related to the temperature analysis of the TMDL.

A shift to extreme weather events characteristic of a meridional flow pattern, especially one that is forecast to be extremely and perhaps historically prolonged, manifests itself in a number of ways such as the increasing frequency and severity of catastrophic wildfire. This in turn affects such hydrologically important factors as evapotranspiration and soil stability. This presents TMDL effects associated not only with "natural receiving temperatures," but also with sediment-related temperature guidelines associated with the COLD beneficial use. Granted, the TMDL process accommodates periodic reevaluation allowing response to changing knowledge and experience. However, there appears to be no analysis or discussion of this acknowledged climatologic effect on riverine systems. Given the current emphasis on climate change within the CEQA process and other statutes that have caused Timber Harvest Plans and development projects within the County to be returned for climate-related analysis, (including one at the personal direction of the California Attorney General) it would seem reasonable to assume that there are legal mandates in the area of climate change that must be addressed within the TMDL that may be lacking.

Another climate-related presentation that the Water Board staff missed at the Klamath Science Conference was the effect of temperature on fish disease. Different diseases have different temperature ranges within which fish are affected. Many diseases share the characteristic that a very minimal change in temperature (commonly as little as 3°C) has considerable effect on the mortality of cold-blooded organisms such as fish. A 3°C upward change in summer and late fall water temperature is conceivable in climate change models. This is further evidence of the need to incorporate climate change into setting TMDLs and developing an action plan to implement them.

Finally, Dr. Neilson stressed adaptation as an extremely important response to climate change. Our region has a history of severe weather. Everyone living in Siskiyou County for a while is well schooled in preparedness, so this concept is by no means a revelation. Important adaptive strategies for water management mentioned by Dr. Neilson included heavier grazing to reduce evapotranspiration and invasion by plant species with more negative hydrologic impact, as well as accelerated and aggressive thinning prescriptions to reduce the threat of catastrophic wildfire. TMDL action plan mandates should be created such that they do not pose inadvertent and difficult-to-alter obstacles to climate change response. Road density mandates that might prompt road decommissioning that might in turn render aggressive thinning cost-prohibitive is an example of unintended consequence to hydrologically beneficial climate-related action.

One of the critical complaints the County has heard consistently from citizens and businesses with regard to management and restoration has been the degree to which regulatory frameworks appear to be trying to "fit a square peg into a round hole." Aside from whether it is anthropogenic, very real evidence of climate change and its associated hydrological and biological responses highlight this baseline/endpoint conflict in neon letters. Though it may be



a lot of work at this late date, even to the point of threatening the mandated deadline, the need to examine the degree to which climate change is affecting our ability to set and meet temperature and other TMDL goals must be addressed to a far greater degree in the TMDL document.

### **Cumulative Socio-Economic Analysis**

Siskiyou County, like other natural resource dependent counties, has experienced extensive and relatively rapid economic and social decay coinciding with the onset of aggressive regulatory response by various state and federal agencies to environmental quality issues. Some of this effect is certainly due to market forces. ~~especially during the current downturn.~~ However, much of this impact is demonstrably related to governmental action (example see *Northwest Forest Plan: the First 10 Years, Socioeconomic Monitoring Results; Volume III: Rural Communities and Economies: p. 127-138; USDA Forest Service, April 2006; Attached with highlighted areas of particularly pertinent sections*).

Though rarely engaged in, retrospective reports such as the Northwest Forest Plan review can show significant actual impact. Supposedly, each action individually requires economic and sometimes socio-economic analysis in the decision process, however analyses are often extremely limited and unavoidably speculative. The result has been a consistent failure to accurately quantify the resulting very real impacts. This is bad enough when each regulatory action is considered by itself. Cumulatively, it has been devastating.

In the case of the Klamath TMDL, the actions proposed affect every natural resource industry in Siskiyou County. Within the document, the necessarily speculative nature of the impact of individualized economic effects results in the typical short shrift given in these analytical sections of decision documents. Completely lacking is the cumulative effect of the TMDL's proposed actions as well as consideration in conjunction with the Water Board's past regulatory creations. Also missing is the evaluation of these impacts in the cumulative context of other state mandates that now exist or can reasonably be foreseen on the regulatory horizon. Examples of this are current initiatives at various stages of implementation and development such as water diversion/use reporting, wetlands protection, groundwater monitoring and the recently-noticed state-wide development of biological objectives for water quality.

While we may quibble over the cause and degree of economic woes facing Siskiyou County, we are agreed on the dire state of affairs. At this point, the straw breaking the camel's back could come from any direction. It is imperative that it should not result from a state agency whose charge is associated with the welfare of its citizens. A cumulative impact analysis may help avoid that catastrophic consequence. Please conduct this analysis.

### **Suction Dredging**

Some of these comments may be similar to those submitted earlier. To the degree they are redundant and may thus contribute to wasted effort on the part of Regional Board staff, I apologize. However, the failure of the current draft to have responded in any substantive



manner to earlier input as well as further knowledge having come my way prompts me to risk whatever irritation this may cause. Suction dredging is too important to an otherwise economically devastated portion of our County to leave any stone unturned (no pun intended) in providing for its economic viability.

The current draft of the TMDL prohibits suction dredging at the confluence with the Klamath River of virtually every significant gold-bearing stream. Obviously, this prohibition is of little short-term import relative to the temporary but complete ban imposed by the California legislature pending the Suction Dredging Permit Environmental Impact Report (EIR) underway by the Department of Fish and Game (DFG). However, while the ban is expected to expire and suction dredging resumed to some degree, the TMDL prohibition will likely have the same economically devastating effect. Worse, regulations once imposed are infinitely more complicated to alter than they were to create.

The EIR is being developed precisely because of the need to apply current science to the permitting of suction dredging. This is complicated by the fact that mining on federal lands is a right codified in federal statutes. To the extent that the proposed TMDL prohibits the only viable way to extract gold in the river, the issues of both federal supremacy with regard to the 1872 Mining Law and other federal laws as well as compensable property "takings" under the 5<sup>th</sup> Amendment of the US Constitution loom large. It seems highly questionable that the legal contusions guaranteed to result are justified at this point by either the current state of science or prudent fiscal and regulatory responsibility.

Apparently, since other areas outside these thermal refugia will still be open to suction dredge mining under the TMDL, Water Board staff views "takings" implications and other issues as insignificant. However, virtually all of the new gold delivered to the mainstem resides in these refugial confluence areas. As previously stated, legitimate 5<sup>th</sup> Amendment implications are obvious. It is urged that the TMDL avoid the tempest entirely. The practice is currently banned, and is awaiting critical science via the EIR such that any needed changes can be made in a time-frame that will prevent any significant negative impact on the beneficial use of thermal refugia.

Related to this matter is the economic analysis of the impacts of the TMDL action plan on suction dredging. As already mentioned, the prohibited areas are where the new gold is located and may permanently reside. There is a very significant economic impact to declaring such areas off limits to mineral exploration. Impact occurs not only to the miners themselves, but also to the businesses and community services now dependent upon what appears to be the last significant component of private industry in the mid-Klamath area. There is plenty of evidence available from local businesses as to the impact of the current temporary ban. Please perform this analysis!

Finally, discharges are the realm of the Regional Board. It is my understanding that it is the effect of the discharge that must be shown to significantly impair a beneficial use. While noise, movement and other non-discharge activities associated with suction dredging may affect the role of refugia in supporting the COLD beneficial use of water, I think such impacts are under the purview of the Department of Fish and Game and are why they are charged with updating



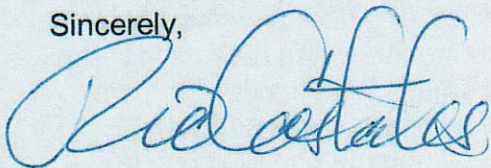
their Permit for suction dredging. This leaves the Regional Board to consider the potential for spilled fuel and lubricants or the extremely temporary and spatially limited discharge plume behind the dredge to affect thermal refugia. It is hard to imagine that any significant impact can be attributed to these discharges. It is beyond any reasonable credulity whatsoever that reasonable mitigations could not have been incorporated. Given that mining is a beneficial use of the water that must be preserved along with other beneficial uses, a ban in these critical areas does not strike the required balance. Please reconsider mitigating practices for suction dredging in thermal refugia.

### **Timber Operations**

The changes reflected in the current draft from the original in response to public comment are greatly appreciated. However, there are some issues that yet need to be addressed. Rather than attempt to explain them myself, I am including comments made on behalf of Timber Products Company by one of their California Licensed Foresters, Chris Quirnbach. Given my many years of association with Timber Products at the logging level as a timber faller, I have seen firsthand their concern for water quality. In reviewing their comments, I see both the concern for the economic viability of the company as well as a sound approach to the identification and management of water-related issues on their company lands. Siskiyou County has an important stake in helping insure these goals. To that end, I have enclosed Mr. Quirnbach's comments to emphasize their importance to the Regional Board.

Thank you for the opportunity to contribute.

Sincerely,



Ric Costales, Natural Resource Policy Specialist  
County of Siskiyou





# Timber Products Company

THE TREMENDOUS RESOURCE

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February 9, 2010

Catherine Kuhlman, Executive Officer  
North Coast Regional Water Quality Control Board  
c/o Katharine Carter  
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Santa Rosa, CA. 95403

RE: Comments on the December 2009 Public Review Draft for the Klamath River Total Maximum Daily Loads Addressing Temperature, Dissolved Oxygen, Nutrient, and Microcystin Impairments, Klamath River Site Specific Dissolved Oxygen Objective, and Klamath River TMDL Action Plan and Lost River Implementation Plan

Dear Members of the Board,

Timber Products Company (TPC) submits the following comments for consideration by the North Coast Regional Water Quality Control Board (Board) in regard to the December 2009 Public Review Draft for the Klamath River Total Maximum Daily Loads Addressing Temperature, Dissolved Oxygen, Nutrient, and Microcystin Impairments, Klamath River Site Specific Dissolved Oxygen Objective, and Klamath River TMDL Action Plan and Lost River Implementation Plan (Public Review Draft). TPC manages approximately 49,000 acres of timberland tributary to the Klamath River from near the California-Oregon border to the mouth of the Scott River as well as approximately an additional 31,000 acres and 15,000 acres in the Scott River and Shasta River hydrologic areas, respectively.

#### Comment 1-Revisions to the June 2009 Public Review Draft

TPC would first like to acknowledge the revisions to the June 2009 Public Review Draft which appear in the December 2009 version. Revisions include the removal of additional prescriptive measures within Section 6.5.7 pertaining to timber harvest in favor of reliance on the Forest Practice Rules developed by the Board of Forestry and Fire Protection (BOF), including the recently enacted Anadromous Salmonids Protection Rules, 2009 rule package. Another revision was the elimination of the requirement within Section 6.5.7 to apply Forest Practice Rules pertaining to anadromous salmonids throughout the entire Klamath Basin (i.e. outside of locations where anadromous salmonids are present or restorable to). These are two positive revisions to the Public Review Draft which are consistent with science and will contribute to more efficient implementation of the Klamath River TMDL Action Plan.



Comment 2-Suggested Edits to an Implementation Measure within Section 6.5.7

The end of Section 6.5.7 of the Public Review Draft details one measure for parties conducting timber harvest activities on nonfederal lands. TPC is supportive of this language but requests that the following double-underlined edits be incorporated into the final version so that the paragraph reads:

“Implement riparian management measures that meet the riparian shade allocations by implementing the *Anadromous Salmonid Protection Rules* (CDF, 2010). Where the ASP rules are not sufficient to meet the TMDL allocations, whether as a result of insufficient prescriptions or geographic limitations, implement additional measures as directed by Regional Water Board staff during the THP/NTMP review process and/or waiver/WDR enrollment process. The necessity for such additional measures shall be supported by substantial evidence unless the landowner agrees to the additional measures in which case substantial evidence is not required.”

The addition of the THP/NTMP process language will help fully utilize those processes for implementation of the Klamath River TMDL, greatly increasing implementation efficiency for landowners as well as NCRWQCB Staff. The additional sentence will help ensure fair implementation of the Klamath River Action Plan by requiring some substantiation of certain additional measures coming from Board Staff. However, the language eliminates the need for substantiation when Board Staff and landowners come to mutual agreement on additional measures, which TPC has found to be the most common outcome of the THP Review and WDR enrollment processes. It should be noted that page 6-52 of the Public Review Draft states the Forest Practice Rules will address temperature issues in the majority of timber harvest situations and that additional measures will only be needed in certain instances.

Comment 3-Suggested change in approach to sediment related water temperature allocation and targets within Section 6.5.1.2

TPC expressed concerns with this section of the Public Review Draft in our previous letter dated August 20, 2009 and it appears the language was not revised in the December 2009 version. Our concerns for the second target (bottom of page 6-31 of the December 2009 version) were related to lack of clarity, lack of time frames, and the burdens placed on all parties to determine compliance. Our concerns for the third target (top of page 6-32 of the December 2009 version) were related to a lack of connection to water quality impacts as well as the burdens placed on all parties to determine compliance.

In our August 20, 2009 letter, we suggested deletion of Targets 2 and 3 from Section 6.5.1.2. In this letter, we once again suggest deletion of these targets but also offer an alternative. We believe a better approach would be to rely on the Forest Practice Rules and the waiver/WDR processes to address sediment inputs. Of course, the revised Implementation Plan already takes this approach for temperature/shade canopy issues.

Comment 4-Previous TPC Comments

At the January 27, 2010 workshop, Board Staff asked that they be made aware of any previous comments which were addressed by revisions which appear in the December 2009 Public Review Draft. TPC provided five comments in a previous letter dated August 20, 2009. Each of these comments will now be discussed.

The first comment of the previous letter recommended that the Board formally recognize the Forest Practice Rules (FPR) as an appropriate implementation program for the



Klamath River TMDL. While the December 2009 version does not formally recognize the FPR as an appropriate implementation program, the revised version does move in that direction by eliminating prescriptive requirements pertaining to timber harvest (see Comment 1 above). Therefore, Comment 1 from the previous TPC letter was partially addressed by revisions in the December 2009 version.

The second comment of the previous letter concerned the concept of site-potential shade discussed in Section 6.5.1.1. TPC recommended that, in lieu of focusing on the ability of individual trees to provide shade, the Public Review Draft instead rely on the FPR to implement shade standards. While the language relating to site potential shade still exists within Section 6.5.1.1, revisions within Section 6.5.7 make it clear that the Implementation Plan will rely on the FPR for the implementation of shade measures. Therefore, the main recommendation within the second comment of the previous letter appears to have been addressed although the discussion of site potential shade still exists within Section 6.5.1.1. The necessity of this discussion, at least in terms of timber harvest on private lands, is questionable given that the FPR will be relied upon and that the FPR contribute towards the eventual development of site potential tree heights in Watercourse and Lake Protection Zones.

The third comment of the previous letter recommended that targets 2 and 3 of Section 6.5.1.2 be deleted. The December 2009 version did not delete these sections so the third comment was not addressed by revisions in the December 2009 version.

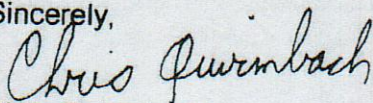
The fourth comment of the previous letter recommended deletion of the third sentence of Section 6.5.7.2 regarding basin-wide application of rules related to the protection of anadromous salmonids. This sentence was deleted so it appears that the fourth comment was addressed by revisions within the December 2009 version. This deletion along with personal communication with Board Staff clearly indicate that rules related to anadromous salmonid protection are not to always be applied in the entire Klamath Basin (i.e. even where anadromous salmonids do not occur nor are restorable) as part of the Implementation Plan.

The fifth comment of the previous letter recommended deletion of certain prescriptive measures related to timber harvest within Section 6.5.7.3. These measures have been deleted in the December 2009 version so the fifth comment appears to have been addressed by revisions within the December 2009 version.

In summary, TPC continues to support the protection of the beneficial uses of water during management activities. TPC hopes that our comments in this letter and previous letters contribute towards the development of an Implementation Plan for the Klamath River which is both protective as well as efficient to implement.

If you have any questions, please feel free to contact me at the above phone number.

Sincerely,



Chris Quirmbach  
Forester  
RPF #2623



did not expect it to. Not only did the number of people working on the forest drop by 59 percent between 1993 and 2003, but the forest budget also decreased 59 percent during the same period. A couple of interviewees from the forest and from the Upper Hood River Valley noted that any progress local communities had made in developing and diversifying was the result of their own efforts, not the result of agency management actions, policy initiatives, or assistance programs.

### **Klamath National Forest and Case-Study Communities**

The case-study communities surrounding the Klamath National Forest were Scott Valley (population 5,126 in 2000), Butte Valley (population 1,883 in 2000), and Mid-Klamath (population 1,660 in 2000) (fig. 8-12), all in Siskiyou County. Federal forest land accounts for 72 percent of all forest land in the county (USDA Forest Service Forest Inventory and Analysis data). Thus, federal forest management policy can substantially affect the county's timber sector. Agriculture and timber were strong components of the Butte Valley and Scott Valley economies historically. The Mid-Klamath primarily depended on timber in the decades leading up to the Plan. As a result, the Plan affected the community strongly.

#### **Scott Valley**

Historically, gold mining, farming, ranching, and logging were mainstays of the Scott Valley economy. Gold mining has been insignificant in recent decades, however. Timber workers began leaving the area in the 1970s and 1980s, when the downturn in the timber economy began. By 1990, roughly half of them were gone. Declines in timber production on the Klamath National Forest in the years immediately preceding the Plan dramatically affected the community's remaining timber workers, causing most of those who still lived in the community to leave with their families in the early 1990s. Between 1994 and 2002, two of the remaining mills that employed Scott Valley residents closed down, with some 145 jobs lost as a result. Manufacturing jobs dropped from 14 percent to 4 percent of total employment in the community between 1990 and

2000. Not all timber workers left the area, however. Some retired, some got lower paying jobs in the service sector, and some continued to work in the industry, commuting long distances to find work or working intermittently.

Although private industrial timberlands are on the mountain slopes above the valley floor, the companies that own them did not provide a meaningful alternative source of employment for Scott Valley timber workers. Only 18 percent of the forest land in Siskiyou County is owned by the private forest industry (USDA Forest Service Forest Inventory and Analysis data). Private industrial timberland owners in northern California have difficulty continuing to operate there because of the loss of timber industry infrastructure and California state regulations that put a burden on their businesses, making it costly to operate. Several companies have moved across the border to Oregon, where the business climate is more favorable to the timber industry. This move has exacerbated the effects of job loss on rural communities in northern California.

Many welfare recipients (another long-term segment of the local population) and people living on unemployment also moved away from the Scott Valley in the mid-1990s, when their benefits apparently ran out. The exodus of these residents and their families, along with most of the remaining timber workers, caused some schools to close or consolidate, and caused a loss of support to the service and business sectors of the community. When timber workers and their families moved away, housing prices slumped briefly, attracting the attention of young retirees from urban areas, and older, mobile, high-earning workers. These people began to move into the Scott Valley, and housing prices have since risen dramatically. Median age in the community rose 33.6 percent between 1990 and 2000, reflecting the exodus of families and the influx of older people. Although the community's population changed in composition between 1990 and 2000, its total population remained at about 5,100.

Ranchers in the Scott Valley community, whose families have been ranching for generations, have also experienced stress over the last decade and have a difficult time maintaining their way of life. The pressures come from



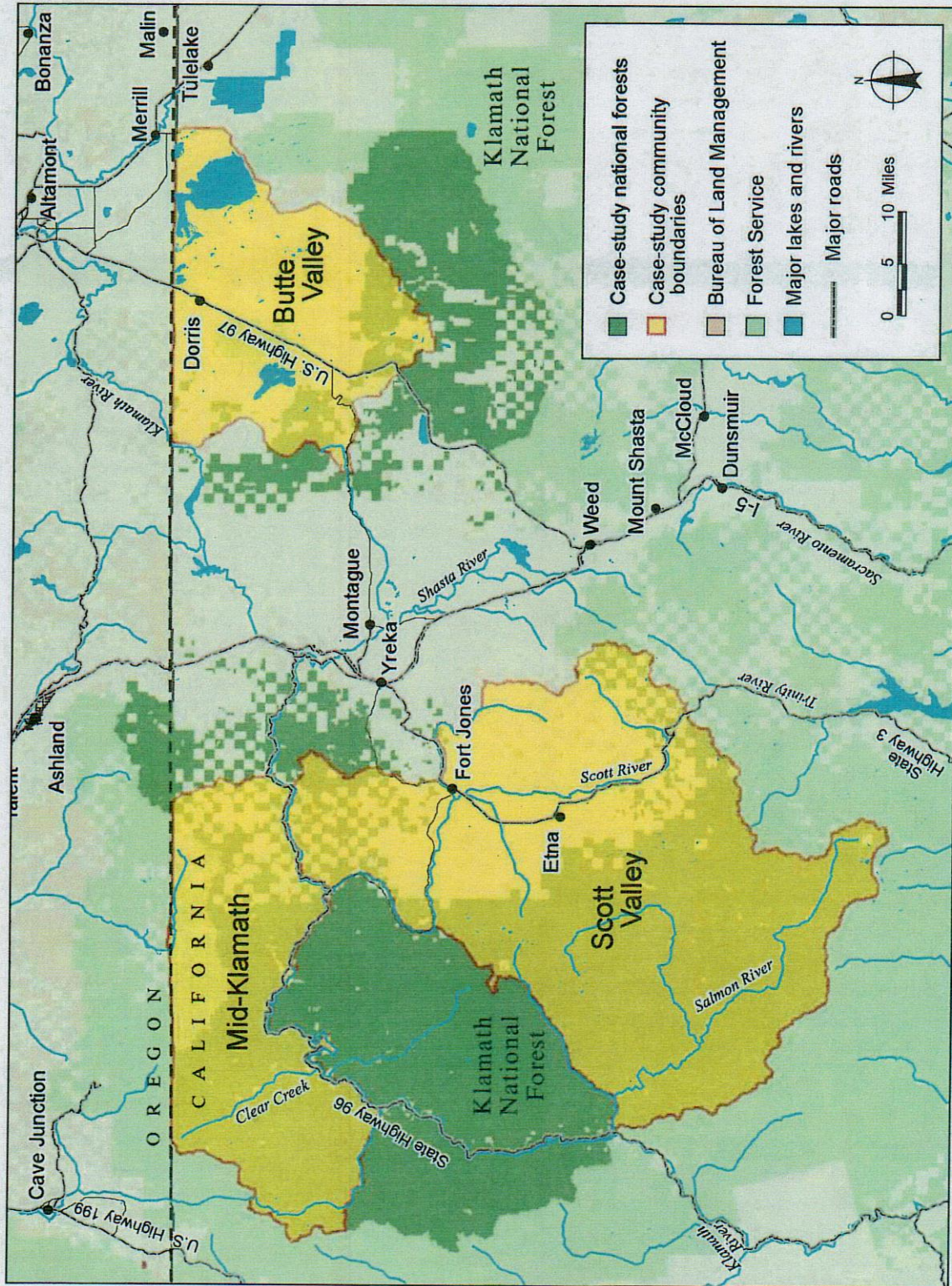


Figure 8-12—Case-study communities, Klamath National Forest.



many sides: flat beef prices in the face of rising labor costs, rising production costs, drought, and the 1997 listing of the coho salmon (*Oncorhynchus kisutch*) as a threatened species. The coho listing may affect local water management and could threaten the use of water by ranchers who irrigate pasture on their private ranches and grow alfalfa for sale.

An estimated six Scott Valley ranchers have allotments on the Klamath National Forest. Changes in forest management under the Plan have added to the other pressures they face. For these permittees, FS allotments play a critical role in their livelihood strategy. The interviewed ranchers, however, stated that drought, stricter rules regarding the use of riparian areas under the Aquatic Conservation Strategy, and increased scrutiny of grazing practices under both the National Environmental Policy Act and the Plan have meant that grazing on the forest has become more labor-intensive, because it has to be managed more carefully. Rising labor costs put a burden on household economies, causing some ranchers to shift from hired to household labor, stressing family resources. Increased scrutiny of grazing practices and plans has added to the climate of uncertainty around the viability of ranching, and permittees interviewed felt insecure about whether they will continue to have their permits renewed. Another concern among permittees is the increased risk of catastrophic fire on the Klamath National Forest over the last decade because of inadequate fuel management. This risk has caused some ranchers to consider obtaining fire insurance for their cattle, adding to the cost of doing business.

Pressures that threaten the viability of ranching make it difficult for ranching families to recruit younger generations into this way of life. Inflated property values in the Scott Valley resulting from the influx of wealthier residents and high inheritance taxes are decreasing the likelihood that family ranches will be passed on to the next generation. Instead, they may well be sold to rich newcomers, or subdivided and developed.

Although the nature of the Scott Valley community has changed over the last decade, the community is persisting. The Scott Valley's proximity to Yreka and the Interstate 5 corridor means that commuting to jobs outside the community is a more viable option than it is for more remote

communities around the Forest. The Scott Valley also has a relatively diversified natural-resource-based economy. The ranching and agricultural sectors, although under stress, are still viable, contributing 18 percent of total employment in 1990 and 19 percent in 2000. The influx of retirees and mobile workers into the community has helped support the local economy, although the demand for many kinds of businesses and services has decreased. Although median income increased from \$27,888 in 1990 to \$32,013 (14.8 percent), unemployment rose from 7.9 to 9.3 percent (17 percent). The community's socioeconomic well-being score dropped from medium (62.6) to low (56.7) between 1990 and 2000. This score was slightly lower than average for the 37 communities within 5 miles of the Klamath National Forest (63.4, medium, in 1990 and 57.4, low, in 2000).

The Scott Valley has a strong constituency of residents who are highly active in community issues, have strong leadership skills, work to promote economic development in the area, are effective at organizing the community around issues of concern, and work to protect the rural way of life and values that predominate there. In 1997, the Scott Valley towns of Etna and Fort Jones were assessed as having high (Etna) and medium community capacity (Fort Jones) (Doak and Kusel 1997: 72). This high community capacity has been a critical factor in helping the community adapt to change.

### Butte Valley

The Butte Valley also has had a diverse natural-resource-based economy historically, with timber, ranching, and farming all playing important roles. The timber industry was an important employment sector in the Butte Valley historically. By 1990, Butte Valley had long since lost its sawmill. Forest industry jobs remained an important component of the local economy, however. When logging on federal forest lands was restricted in the early 1990s, the local effects were big. Truckers, fallers, markers, and people who worked for the FS lost jobs. Loggers and truckers could no longer find jobs that would sustain their families. Some individuals began "tramp" logging, going farther and farther from home to find work. Many people moved away, disrupting close family intergenerational ties and established ways



of life. By 2003, the bigger truck operators were in cities, and traveled greater distances to work.

Some people stayed in Butte Valley and commuted to work in the mills in Klamath Falls, Oregon. Others stayed and switched to lower paying jobs in the service sector, sometimes commuting to Klamath Falls. Pay reductions caused a reduced standard of living and often required both husband and wife to work to support their household. Some interviewees reported an increase in drugs, crime, and other social problems in the community since 1990 that they associated with job loss in the timber sector.

Two small mills remain in the area in the town of Dorris. One is a molding mill, in operation since 1924, now an industry leader in the United States. The other operation went through two incarnations as a molding business before the current peeler core business started in 1997. These and other successful businesses persisted by developing markets outside the local area. The mills shifted their supply of raw materials from expensive, locally produced wood to cheap, imported wood from New Zealand and peeler cores from Oregon mills. They also stayed viable by responding to orders quickly.

Apart from these two small wood-related businesses and FS employees at the local ranger district office, interviewees did not know anybody in Butte Valley who was employed in timber industry-related jobs in 2003. Manufacturing jobs dropped from 12 percent to 9 percent of total employment in the community between 1990 and 2000.

While the timber industry was declining in Butte Valley, the potato industry was thriving. Potato farming was a year-round source of employment, so workers bought houses and settled in the community. Agriculture, forestry, fishing, hunting, and mining were 26 percent of total employment in 1990, and grew to 33 percent by 2000. Since 2000, however, potato farming in Butte Valley has largely disappeared because of international trade practices, changes in American eating habits, and the expensive cost of pumping ground water to irrigate them. Potato farmers sold out to strawberry farmers, who grow strawberry plants in Butte Valley and ship them elsewhere to be replanted and produce berries. Work on the strawberry farms is seasonal, and is performed mainly by migrant workers. Interviewees

did not perceive strawberry growers as contributing much to the community or the local economy because of their seasonal presence and practice of hiring mostly nonlocal workers. Trends in Butte Valley's farming sector were not viewed as being tied to federal forest management policy.

Ranchers were another important component of the Butte Valley agricultural sector. Ranchers who had FS allotments relied on them heavily because most of them did not own enough acreage to keep cattle on their own property year-round. Typical permittees ran cattle on their own land for part of the year, on the Klamath National Forest for part of the year, and on pasture rented from other private landowners for part of the year. In general, ranchers moved their cattle to the Klamath allotments in late spring or early summer, where they remained until late summer or early fall.

In recent years, the water crisis in the Klamath Basin and the drought in southern California have caused farmers to come to the Butte Valley in search of farmland and water for irrigation. This search has created competition among ranchers for land and has driven up the cost of renting seasonal pasture. Ranchers who cannot afford to rent pasture locally must take their cattle farther away to find available pasture, increasing the cost of production.

Production costs associated with running cattle on the Klamath National Forest have reportedly increased since the Plan was adopted. The Plan was perceived as increasing agency scrutiny over grazing practices. Some interviewees said that ranchers had to monitor their animals more closely on allotments to be sure that they did not overgraze. They also had to do more mitigation work to comply with the Aquatic Conservation Strategy, such as maintaining more miles of fences to keep cattle out of riparian areas. Both of the requirements increased labor demands. Greater scrutiny over grazing and reduced access to water meant that allotment days and animal unit months had gradually declined each year. This decline increased ranchers' needs for access to private pasture land, which was becoming increasingly scarce and costly to use. Some interviewees mentioned that the heightened risk of fire on the Klamath might cause ranchers to want fire insurance for their cattle to protect them from catastrophic loss, further increasing production



costs. Despite these pressures, ranchers interviewed in Butte Valley felt that their FS allotments were secure relative to the private land component of their grazing strategy. They felt squeezed, however, by rising production costs in the face of unstable beef prices. According to interviewees, the only ranching families likely to persist were those who had enough pasture and water on land they owned to support their herds year-round.

One segment of the Butte Valley population that reportedly has increased since 1990 are the people on fixed or low incomes, including retirees, who find the cost of living, natural amenities, and proximity to services in Butte Valley attractive. Another segment of the local population commuted to jobs across the border in Oregon, mainly in Klamath Falls, a large regional center about 20 miles away.

Some things in the Butte Valley changed little since 1990. For example, land values and the cost of living remained low. The population stayed at around 1,900 residents. Services remained about the same. The socioeconomic well-being score of the community was low in 1990 (52.4) and was still low in 2000 (50.7), substantially lower than average for the 37 communities within 5 miles of the forest. Nevertheless, median household income rose slightly (from \$21,594 to \$23,826), unemployment decreased (from 13 to 9.7 percent), and the percentage of the population living in poverty also decreased (from 26.8 to 21.9) between 1990 and 2000.

Highway 97—an alternative to Interstate 5 that many truckers prefer—runs through the Butte Valley and brings traffic that has helped sustain the business sector there, which could not be supported by the local population alone. Retail trade grew from 4 percent of total employment in 1990 to 11 percent in 2000. The Dorris city council has also worked to attract business to the Butte Valley by improving the city's infrastructure and cleaning up the town. The community's proximity to Klamath Falls, however, limits its ability to compete for business (Doak and Kusel 1997: 48). The loss of timber workers, FS employees, and farming families from the Butte Valley caused a loss of people who were willing to engage in civic affairs and promote community development. The core nucleus of individuals who played this role in 2003 was

small. In a study of community capacity in the Klamath region, Butte Valley received the lowest possible community capacity score (Doak and Kusel 1997: 6).

Local residents interviewed viewed the Butte Valley as potentially attracting tourists. In 2003, the section of Highway 97 that goes through Butte Valley was included as part of the Volcanic Legacy Scenic Byway. The community and agencies are promoting bird-related tourism in the area. The city of Dorris recently built the tallest flagpole west of the Mississippi River. In the last 2 years, Dorris also sponsored a Fourth of July celebration, and an "Art in the Park" event. All of these activities were designed to attract tourists, who the community hopes will contribute to the local economy. Residents were divided in their support of recreation and tourism development, however, and acknowledged that it is not likely to be a solution to the area's economic problems. The Butte Valley is more a pass-through area than a destination.

### Mid-Klamath

Between the 1960s and the early 1990s, the economy of the Mid-Klamath community was driven by timber. The local timber economy, in turn, almost wholly depended on federal timber because the community is surrounded by vast tracts of the Klamath National Forest. Community interviewees said that during the 1970s and 1980s, getting logging and mill jobs locally was easy. Five mills operated in the area. When the federal timber supply dropped off in the early 1990s, mills closed and jobs became scarce. Not just loggers and mill workers were affected; the FS, which had been the other major employer in the community, had to downsize because many of its employees supported the forest's timber program. Many mill workers, loggers, and FS employees moved away in search of work elsewhere, taking their families with them. As a consequence, housing prices dropped, stores and service centers that supported these workers shut down, and school enrollment declined precipitously. Manufacturing went from contributing 30 percent of total employment in 1990 to just 4 percent in 2000. Not only did the community lose its economic base, but it also lost productive people who were hard-working and contributed much to the community. The exodus of



timber workers from the Mid-Klamath community was accompanied by the loss of a way of life and local culture. By the mid-1990s, most of this culture was gone, although some loggers have remained in the area.

Community residents interviewed said that since the decline of the local timber economy, new people have moved into the Mid-Klamath community, especially people on fixed incomes. One such group was characterized by interviewees as being low-income people on welfare, who are drawn to the area in part because of the low cost of living there. Another group of newcomers consists of people in the early phase of retirement, who do not yet require the health and transportation infrastructure that more elderly retirees do, amenities currently lacking in the Mid-Klamath. A small number of "urban escapees," who telecommute or otherwise work remotely from their place of employment, have also settled in the Mid-Klamath area. Nevertheless, total population in the community dropped 21.6 percent between 1990 and 2000, from 2,117 to 1,660.

The outmigration of families with children, the inability of young people to remain in the community because jobs are lacking, and the immigration of retirees and others greatly altered the social and economic structure of the Mid-Klamath community. Median age rose by 36.6 percent between 1990 and 2000, and school enrollment dropped by 41.8 percent. Median household income sank 29 percent, unemployment rose 21.1 percent, and the percentage of the population living in poverty rose 64.7 percent. The socioeconomic well-being score dropped from low (51.7) to very low (42.3), making the Mid-Klamath one of the lowest scoring communities within 5 miles of the Klamath National Forest.

Other local consequences are associated with restrictions on timber harvest under the Plan. Stakeholders asserted that survey and manage species, and other Plan requirements have almost made it impossible to implement fuel management projects for the Klamath National Forest. The fire risk posed by accumulating fuel in the vast national forest lands surrounding the Mid-Klamath community is of great concern to residents and local officials. The Plan has had a negligible effect on other forest resource uses.

Very few local grazing permittees exist. The one permittee interviewed stated that the Plan had no effect on his practices because his allotment is at a high elevation with no rivers or creeks, and hence no associated riparian constraints.

Mid-Klamath residents who remained in the community did so out of a commitment to place, and a determination to find alternate means of survival there. In some cases, one family member (typically the husband) worked outside the area and came home on weekends, while the spouse and children remained in the community. Other residents diversified and engaged in a mix of pursuits, with both spouses working to support the family. Some loggers owning equipment did contract work on the forest, such as road decommissioning. Other natural-resource-based jobs were limited. Unlike the Scott Valley and the Butte Valley, farming and ranching were not viable livelihood strategies in the heavily forested, steeply mountainous Mid-Klamath area. The shortage of private land has also limited development opportunities in the community. Some people found adjusting to change very difficult, contributing to drug abuse, domestic violence, and divorce.

The forest did provide recreation-related opportunities, and some residents were hoping that recreation would provide new economic vitality to the community. The Happy Camp Chamber of Commerce believed that the Klamath River and the local scenery were the Mid-Klamath's biggest assets, and were exploring ways to bring visitors to the community by marketing these resources. The Chamber started an annual Fourth of July motorcycle event 3 years ago, which draws many visitors.

Two recreational activities predominated in 2003: gold mining and river rafting. In 1986, two local residents started a recreational mining club. In 2003, this club had more than 60 miles of mining claims along the Mid-Klamath River and its tributaries, and club membership stood at about 800. Members come to the Mid-Klamath between June and September and dredge for gold. Most interviewees viewed them as major contributors to the local economy, although concern was expressed about the environmental effects of their behavior. Similarly, river rafting was uncommon on the middle Klamath River in



1990. In 2003, 75 outfitter-guides were reportedly running rafting trips there between spring and fall. Rafters contribute to the local economy by staying in local motels, eating at restaurants, and buying supplies there. Nevertheless, some community members were skeptical that recreation will contribute much to the economic development and diversification of the community.

Several interviewees commented on the role of natural disasters in supporting the local economy. The 1997 flood brought nearly \$8.8 million in emergency funding to the Klamath National Forest and other agencies, which translated into local jobs such as repairing and decommissioning roads. Fire suppression on the forest in 1999 added another \$3.5 million to the Klamath National Forest budget, which also contributed jobs and income to the local economy (Dillingham 1999: 1). Many interviewees viewed fire as a growth area from the economic standpoint.

Interviewees consistently said that the Karuk Tribe was the main driving force behind the survival of the Mid-Klamath community after the timber decline. Many of the tribe's 3,200 members live in the Mid-Klamath community. Although the community includes their ancestral territory, they do not have a reservation. The Karuk were federally recognized in 1979 (Tobe et al. 2002: 2). Many tribe members participated in the local timber industry as loggers or mill workers. The disappearance of those jobs provided an impetus for the Karuk to organize and seek ways of promoting economic development in the community. They have been extremely successful over the last decade at obtaining grant money to fund projects such as a museum, housing development, education program, and natural resources department. The tribe and the FS were the two biggest employers in the area in 2003. Public administration rose from 2 to 9 percent of total employment between 1990 and 2000. The tribe's annual operating budget stood at roughly \$12 million in 2001 (Tobe et al. 2002). The tribe had fewer than 20 employees in the early 1990s, but it had over 100 employees in 2003. The tribe also took over managing some local businesses and service centers in the Mid-Klamath that might not have remained viable otherwise, such as a hardware store and a health clinic. Tribal representatives interviewed felt a sense of responsibility in helping the

community survive. The tribe, not the FS, was viewed as the major contributor to community stability and socioeconomic well-being in the area. Concern was expressed, however, over the long-term sustainability of the tribal economy, which depended on soft money.

### **Role of Federal Forest Management Policy in Influencing Change**

Many Mid-Klamath interviewees viewed the listing of the owl under the Endangered Species Act and the Plan as causing the demise of the timber economy and culture in their community. In the 1970s and 1980s, local mills reportedly obtained most of their timber from national forest lands. When the timber stopped flowing, the mills were forced to close, and loggers and mill workers lost their jobs. One logger interviewed stated that the Plan made operating difficult for small loggers who remained in the community. Small, independent loggers once made a living by buying small timber sales they could afford. Plan requirements increased the cost of timber-sale preparation, so that new sales under the Plan had to be large to be cost-effective. Small logging operators could not always afford to bid on these large sales, and therefore felt squeezed out of the market.

Butte Valley was also affected by changes in federal forest management policy, although it lost its main mill decades before the Plan. The curtailment of timber harvest on the Klamath caused job loss in the community's timber sector, which has virtually disappeared except for two small mills that persist but do not use federal timber. The Scott Valley's timber sector started to decline in the 1970s, and continued to decline through the 1980s. Cutbacks in federal timber harvesting exacerbated this trend, and reportedly contributed to the virtual disappearance of the community's timber economy.

California state regulations creating an unfavorable business climate for private timber companies, combined with the loss of local wood-products industry infrastructure, caused some of these companies to move their operations to Oregon and Washington. This move added to the decline of timber jobs in the area.

The Plan affected more than timber workers in communities around the Klamath National Forest. Lack of adequate



fuel treatment on the forest, in part because of the difficulty of implementing surveys for survey and manage species and other Plan requirements, increased the risk that local communities face from fire. Growing fire risk is a critical concern to adjacent property owners and residents of adjacent or nearby communities. Rising fire risk also affects local and regional fire-fighting organizations, and is of great concern to local and county governments.

Ranchers interviewed reported many factors that were making difficult their maintaining a viable ranching business and lifestyle. The drought resulted in less forage and declining water sources that require increasing protection and cattle management. The Plan incorporated and strengthened requirements for riparian areas during the 1990s. Incremental costs to production when requirements change add to all of the other pressures ranchers face. From the permittees' point of view, their operations become increasingly marginal as costs rise. Apparently most ranchers were able to maintain their businesses during the first decade of the Plan by absorbing the added costs, but they do not see a sustainable future in the ranching business for their children.

### The FS Role in Mitigating Plan Effects

#### Resource and recreation outputs—

An average of 200 million board feet of timber was harvested annually on the Klamath National Forest during the 1980s. Under the Plan, the forest's estimated annual average PSQ is 51 million board feet. Interviewees from all three communities reported that the Klamath National Forest does not contribute to socioeconomic well-being in their communities by providing timber as it once did. The small mills that remain in Butte Valley do not use national forest timber. The Scott Valley has few remaining timber workers. Those Mid-Klamath residents who are still trying to make part of their living in the wood-products industry are frustrated by the lack of reliable supplies of federal timber, so making a living is difficult for them.

The Klamath National Forest plays an important role in providing local ranchers with the grazing allotments critical to their viability. Plan standards and guidelines for riparian reserves added to the growing requirements for riparian

protection on national forest lands in place before the Plan, increasing ranchers' operating costs. Mining is negligible, except for recreational mining. Special forest products are important to tribes, but the Plan has hampered the ability of the forest to manage for some tribal cultural products that grow well in burned areas. Matsutake mushrooms have commercial importance, but provide little in the way of economic benefit to local residents because most harvesters and buyers come from outside the area. These people do support local businesses when they are in town, however.

Interviewees had mixed views about the Klamath National Forest's contributions to recreation and tourism development. The Butte Valley community recognized the forest as a tourist attraction and wanted to see the forest develop interpretive programs to help attract more visitors. Interviewees from the community viewed the forest's efforts to develop east-side snowmobiling opportunities in a positive light. This development has brought more recreationists to the area. The Klamath National Forest also worked with the community to promote a Volcanic Byway designation, and the FS in Oregon helped develop a brochure on local birding opportunities.

In the Scott Valley, people expected that reductions in federal timber harvest would be partly offset by increased investment in developed recreation and tourism. These expectations have not been met. According to several interviewees, not only had the forest failed to work with the community to develop recreation and tourism options, but it could not maintain the existing recreation opportunities. For example, the forest had yet to clear and open a large number of wilderness trails in the Scott Valley area closed by a timber blowdown that occurred during a storm in 1997. Local outfitters said the Klamath National Forest could not respond to their requests to address problems relating to recreation use on the forest because it did not have the staff.

In the Mid-Klamath, the Chamber of Commerce was working with the Happy Camp Ranger District to design and build a visitor center to be housed in the FS office, and to develop visitor materials and resources. They were also working together to identify mountain bike trails on the forest, and to attract professional bikers to the area, in the hope that one day it will become a destination for mountain



bikers. Some interviewees felt that the FS was not doing much to help facilitate recreation development; they stated that lack of campground maintenance, boat launches, maintained trails, and road closures were deterrents.

**Agency jobs—**

The decline in the Klamath National Forest's timber program triggered declines in the forest's budget and jobs. The forest went from having 636 employees in 1993, to 441 in 2003, a loss of 31 percent (fig. 8-13). Although this decline was not as severe as on the other two case-study forests, it strongly affected local job opportunities, particularly in the Mid-Klamath, where a ranger district office closed in 1997.

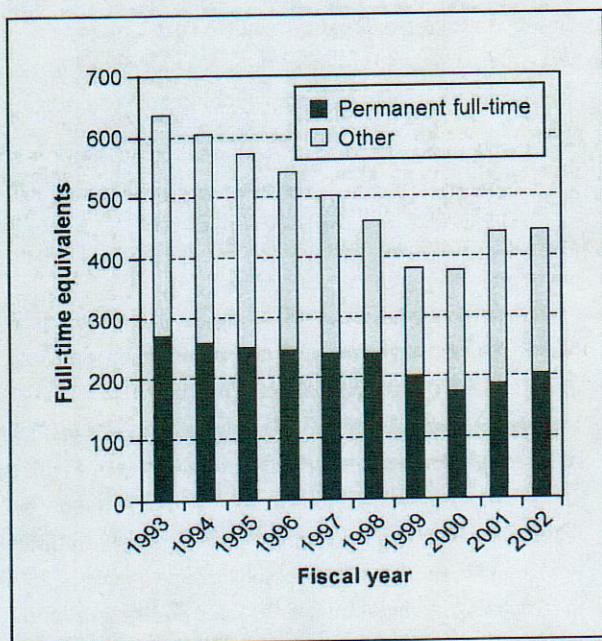


Figure 8-13—Klamath National Forest staffing levels, 1993–2003.

**Contracting—**

Between 1990 and 2002, the Klamath National Forest spent \$44.5 million procuring land management services. Most of this spending (64 percent) was between 1990 and 1993 (fig. 8-14). After 1993, contract spending on the Klamath dropped sharply. Between 1990–92 and 2000–2002, contract spending declined 78 percent. The Klamath's rate of reduction in procurement spending was considerably

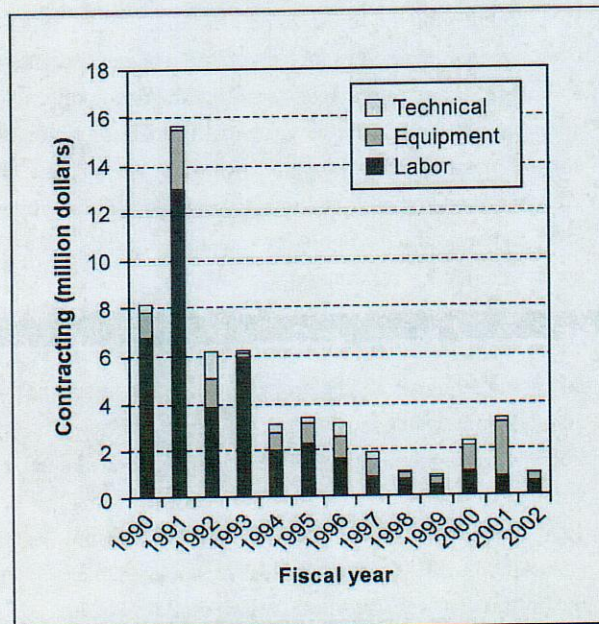


Figure 8-14—Klamath National Forest land management contracting by work type, 1990–2002.

greater than for the Plan area as a whole, but it was comparable to the decline in contract spending on other northern California forests (see Moseley et al. 2003). The relatively high contract spending in the early 1990s can likely be explained in part by salvage and restoration work going on at that time after a catastrophic fire in 1987. In 1997, the forest had a major flood. The Klamath received \$8.8 million of emergency federal highway repair money in 1998–99 for storm-related repair and restoration work. The rise in contract spending in 2000 and 2001 reflects the surge in restoration work resulting from the flood money. As with other national forests in the Plan area, the Klamath substantially reduced its spending on labor-intensive contracting over the course of the study period. The Klamath also reduced its spending on equipment-intensive and technical contracting. During 1990–92, 101 contractors worked for the Klamath National Forest, a number that fell to 58 by 2000–2002, a 43 percent decline. In 1990–92, contractors working on the Klamath came from up and down Interstate 5. Over time, contractors were increasingly concentrated in northern California and southern Oregon, and then finally in northern California.



Interviewees from the case-study communities viewed contracting on the Klamath as having contributed some local opportunities for residents. In Butte Valley, contracting work on the forest was not significant; once timber workers moved away, few local people had the needed skills and equipment. More recently, a few seasonal contracting job opportunities have become available in the community through the National Fire Plan to reduce hazardous fuels. In the Scott Valley, survey and manage species requirements provided some opportunities for local residents. The forest was praised for supporting training and economic development opportunities in the area of technical contracting. Much of this work was accomplished through support for a local nonprofit organization whose trainees worked on the Klamath doing surveys, restoration work, geographic-information-system (GIS) analysis, and other analyses. In the Mid-Klamath, a small number of individuals do contract work on the forest, such as road decommissioning and restoration work. The availability of contract work fluctuates depending on natural disasters (storms, floods, fire). Often, the season of work is restricted to a few months during summer, and contracts are sporadic, so relying on them as a steady source of work is difficult.

**Community economic assistance—**

The Northwest Economic Adjustment Initiative brought nearly \$2 million in grant money to the Klamath National Forest over 9 years. During this period, the forest averaged \$217,000 per year in grant money, with a high of \$478,000 in 1994, and a low of \$50,000 in 1999 and 2000 (fig. 8-15). The bulk of the initiative money became available during the first 4 years of the Plan. Rural community assistance grants composed the majority of this funding. Communities often used Rural Community Assistance grants to leverage money from other sources through matching grants and other means, so that the total benefit they provided was far beyond their face value. Not only did the initiative provide economic assistance to communities, but the way in which it was administered caused new collaborative relations to form between the agency and communities, where previous relations focused on the timber business.

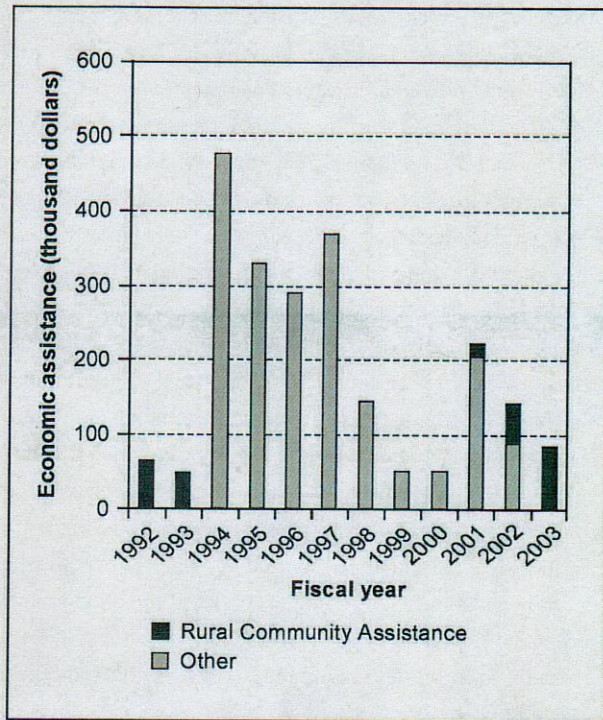


Figure 8-15—Klamath National Forest community economic assistance program trends. Not adjusted for inflation.

In the Butte Valley, federal grant money to support economic and community development, and small business loans—some of which came through the initiative—were critical for helping local businesses survive. In Scott Valley, the effectiveness of initiative funding and Rural Community Assistance grants received mixed reviews. They were believed to be helpful in funding specific projects and infrastructure developments, but their long-term success was believed to be limited by inconsistent commitment and follow-up on the agency’s part. Initiative money was not viewed as helping former timber workers adapt to changing job markets because most of the workers had lost their jobs and left by the time the funding arrived.

The Mid-Klamath community received a substantial amount of initiative funding in the mid-1990s. Tobe et al. (2002) studied how effective that funding was. The Karuk were able to secure \$1.86 million in initiative funds, and the community secured additional funds through other mechanisms. Numerous planning activities took place,



and several projects were initiated, roughly one-third of which were natural-resource-based (such as a small hardwood mill and a furniture business). Tobe et al. (2002) found that the initiative did increase the physical infrastructure and financial capital of the community. The initiative also provided job training and skills development, but it did not lead to creating significant local jobs. Instead, retrained workers had to move away to find new jobs. Nor did it build leadership capacity in the community to replace what was lost when timber workers moved away. What new businesses were created could not absorb displaced timber workers, who benefited little from the initiative programs. The FS did not create the job opportunities hoped for, or provide the raw materials required to make new value-added wood-products businesses successful. The main criticism of the initiative reported by interviewees was that it provided one-time funding for projects, but these projects were not linked together to create long-term, sustainable jobs for local residents. And the funding ran out too quickly to be effective.

#### Payments to county governments—

The spotted owl safety net measures resulted in substantially higher payments to counties than would have been received through forest-revenue sharing alone, given diminishing timber harvests (fig. 8-16). The Secure Rural Schools Act provided the highest rate of payments to counties since 1990. In addition to being an important source of revenue to support roads and schools countywide, those payments contributed a significant amount of money to support local resource-related projects on and around the Klamath National Forest. Title II of the act has made more than \$1.7 million available for resource-related projects on both private and national forest lands in the county since 2001. Many interviewees expressed concern that the Secure Rural Schools Act provisions expire in 2006.

#### Summary

The picture of changing socioeconomic benefits from the Klamath National Forest since the Plan was adopted is one of decline. Grazing, recreation, mining, and special forest products activity remained more or less stable overall, but

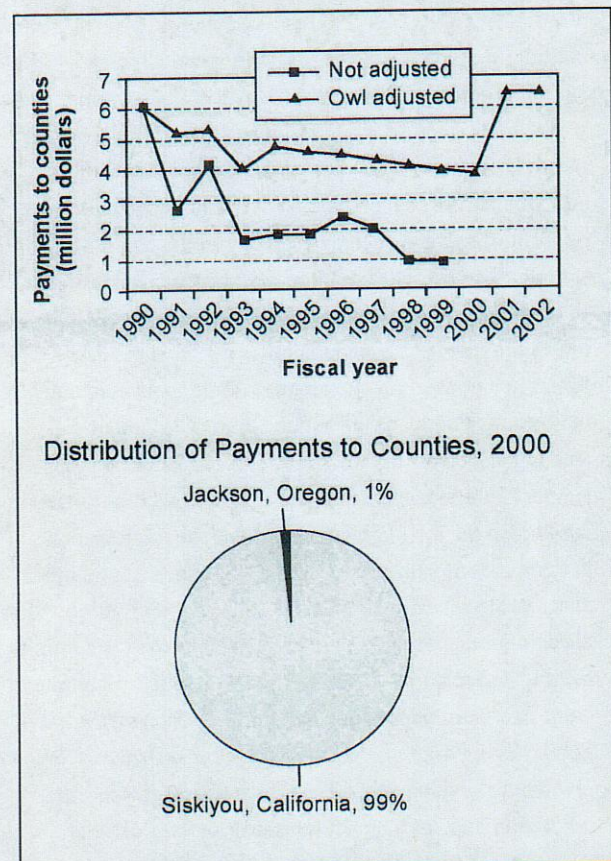


Figure 8-16—Klamath National Forest payments to counties. "Owl adjusted" reflects the increased payments to counties made to mitigate the effects of decreased timber revenue and revenue sharing.

timber harvest activity, by far the most economically important activity on the forest until the early 1990s, dropped substantially, as did agency jobs and contracting dollars. Managing fire risk to communities became more difficult. Payments to county governments have stabilized, at least for the near term. Community economic assistance money increased substantially during the mid-1990s, but this funding has now returned to pre-Plan amounts.

Interviewees from the Butte Valley viewed the Klamath National Forest as not having played much of a role in helping the community adapt to change. Although a few small contracting opportunities, some recreation developments, and some economic assistance have happened, no new forms of resource-related work on the Klamath have



emerged to contribute meaningfully to the local economy of Butte Valley. The same was true in the Scott Valley, although interviewees there viewed the Klamath as having made some small contributions through contracting opportunities and initiative funds. The consensus among Mid-Klamath interviewees was that the forest had done little to help the community recover from the loss of timber-related benefits. Many interviewees recognized the importance of payments to county governments, however, stating that their communities depended on those funds for supporting schools and other services.

### **Coos Bay District and Case-Study Communities**

The Coos Bay District lands, distributed up and down the southern Oregon coast, are bordered by the Siskiyou and Siuslaw National Forests in some places. Thus, the effects of the Plan on the case-study communities (fig. 8-17) were likely the result of implementing the Plan on both the BLM's Coos Bay District and the surrounding national forests. The Greater Reedsport community, on Oregon's central coast at the mouth of the Umpqua and Smith Rivers and around Winchester Bay, had a population of 5,545 in 2000. It lies at the northern extent of Coos Bay District land. Greater Myrtle Point is at the southern end of the Coquille Valley, roughly 20 miles inland from the main coastal highway. It had 4,927 residents in 2000. Greater Coos Bay was the largest of the case-study communities associated with the BLM Coos Bay District. It had a population of 28,596 in 2000. Coastal communities, both the Greater Reedsport and Greater Coos Bay community economies revolved around timber and commercial fishing in the 1970s and 1980s. Shipping and ship building were also important in Greater Coos Bay. Lying inland, the Greater Myrtle Point community was oriented toward timber and agriculture. All three communities experienced social and economic change during the 1990s, in part the result of changes in federal forest management policy.

### **Greater Reedsport**

Greater Reedsport was economically oriented toward timber and commercial fishing in the decades that preceded the Plan. Two International Paper Company businesses—a paper mill and a sawmill—were the economic backbone of Greater Reedsport for three to four decades. The sawmill, established in 1964, closed in 1991; at the height of operations, it employed 400 people. The paper mill, established in 1956, was having trouble by the early 1990s and went out of business in 1999, displacing some 350 workers. Several other small mills in the area also closed during the 1980s and 1990s. Currently, only two small mills continue to operate in the area.

These mill closures hugely affected job opportunities in the Greater Reedsport area. Manufacturing went from 25 percent to 6 percent of total employment between 1990 and 2000. Many middle-income, working-class families left the area, causing school enrollment to drop and some secondary support businesses to close. Greater Reedsport's population dropped 11 percent between 1990 and 2000 (from 6,246 to 5,545), and school enrollment dropped 14 percent during the same period, causing the area's middle school to close. A significant effect of these changes has been the loss of the community's timber culture. Working in the timber industry is no longer a way of life that families can pass down across generations. The community's timber infrastructure has declined with the loss of timber workers and their skills. Moreover, local youth can no longer graduate from high school and go straight to quality, family-wage jobs.

At the same time, the commercial fishing industry suffered a downturn, adding to the job loss in the Greater Reedsport community. During the 1980s and 1990s, all 30 charter-boat businesses also closed, causing Winchester Bay's marina to lose boats and business.

The exodus of timber workers from Greater Reedsport created a housing glut, which reduced property values and attracted retirees. Many retirees have moved into the community over the last decade, reflected by a change in the median age of community residents from 38 to 48 between 1990 and 2000 (a 26 percent increase). Although the loss of working-class timber families caused a drain on the community's capacity and leadership skills, many retirees