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FINAL

**HERGER-FEINSTEIN  
QUINCY LIBRARY GROUP  
FOREST RECOVERY ACT  
PILOT PROJECT**

**STATUS REPORT TO CONGRESS  
FISCAL YEAR 2003**

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## Pilot Project Summary

The *Herger-Feinstein Quincy Library Group Pilot Project Status Report, Fiscal Year 2003* is the fifth annual status report required by the Herger-Feinstein Quincy Library Group Forest Recovery Act of 1998 (HFQLG Act). It covers the period from October 1, 2002 to September 30, 2003 (FY03) and describes how, and to what extent, the specific mandates of the HFQLG Act were accomplished. The HFQLG Act was signed into law in October 1998 and is attached in Appendix A. In February 2003, the President signed the FY03 Interior and Related Agencies Appropriations Act which extended the HFQLG Pilot Project legislation by five years. The new termination date is the end of fiscal year 2009. A brief history of the Pilot Project can be found in Appendix B.

Since the Herger-Feinstein Quincy Library Group (HFQLG) Final Environmental Impact Statement Record of Decision (ROD) was signed in August 1999, the Pilot Project has accomplished 106 projects consisting of approximately 90,000 acres of Defensible Fuel Profile Zones (DFPZ), 3,300 acres of small Group Selection (GS), and 1,900 acres of Individual Tree Selection (ITS). Additionally, the Pilot Project has accomplished 57 riparian restoration projects consisting of 2,400 acres. See Table 1 below.

**Table 1. Summary of Allocation, Expenditures and Accomplishments: FY99 to FY03.**

Fiscal Year	Allocation (Millions\$)	Expenditures (Millions \$)	Year End Balance (Millions)	Resource Management Activities Accomplished (Acres)				
				DFPZs	GS	ITS	Riparian Restoration	Total Acres
1999	8.0	2.0	6.0	640	0	172	0	812
2000	6.2	7.2	(1.0)	7,215	200	772	81	8,268
2001	31.2	28.2	3.0	41,197	1,836	528	945	44,506
2002	26.2	21.5	4.7	16,651	1,258	395	838	19,142
2003	26.2	23.1	3.1	24,442	0	44	537	25,023
<b>Totals</b>	<b>97.8</b>	<b>82.0</b>	<b>15.8</b>	<b>90,145</b>	<b>3,294</b>	<b>1,911</b>	<b>2,401</b>	<b>97,751</b>

DFPZ=Defensible Fuel Profile Zone; GS=Group Selection; ITS=Individual Tree Selection

## Introduction

The *Herger-Feinstein Quincy Library Group Pilot Project Status Report, Fiscal Year 2003* is the fifth annual status report required by the Herger-Feinstein Quincy Library Group Forest Recovery Act of 1998 (HFQLG Act). It covers the period from October 1, 2002 to September 30, 2003 (FY03) and describes how, and to what extent, the specific mandates of the Act were accomplished.

This annual report discloses the status of Pilot Project implementation and accomplishment during FY03, as required by Sections 401 (j)(1)(A-G) of the HFQLG Act (see Appendix A).

## Use of Funds

This section describes total expenditures, as required by Section 401 (j)(1)(A) and (B) of the HFQLG Act:

*(A) A complete accounting of the use of funds made available under subsection (f)(1)(A) until such funds are fully expended.*

*(B) A complete accounting of the use of funds and accounts made available under subsection (f) (1) for the previous fiscal year, including a schedule of the amounts drawn from each account used to perform resource management activities described in subsection (d).*

## Fiscal Year 2003

Table 2 below shows how funding was allocated for implementation of the Pilot Project in FY03. Fund codes identify the primary purpose of appropriated funds. The Pilot Project uses three fund codes. National Forest Timber Management (NFTM) fund code is used for planning, preparing and administering timber sales; the Wildland Fire Hazardous Fuels (WFHF) fund code is used for planning, preparing, implementing, monitoring, and administering fuels reduction projects (DFPZs); and the National Forest Vegetation and Watershed (NFVW) fund code is used to fund planning, preparing, and implementing forest health improvements as well as watershed and riparian restoration projects.

**Table 2. FY03 Funding for Pilot Project Implementation.**

<b>Fund Code</b>	<b>Enacted Funding</b>
NFTM	<b>5.0</b>
WFHF	<b>18.1</b>
NFVW	<b>3.1</b>
<b>Total to Project</b>	<b>\$26.2</b>

Funds presented in millions of dollars

NFTM = National Forest timber management

WFHF = Hazardous Fuels Reduction

NFVW = National Forest vegetation and watershed management

In August 2003 the Pilot Project received national direction to use a Budget Line Item (BLI) NFCC. The primary purpose of this fund code was to finance projects specifically targeted at reducing hazardous fuels on landscapes at the highest risk of catastrophic wildfire. Funding for this BLI came from reprogramming the WFHF fund code.

Table 3 tracks the expenditure of funds in Table 2. FY03 project expenditures include: 1) administering and monitoring projects from prior years; 2) implementing projects planned in prior fiscal years; 3) planning and accomplishing FY03 projects; 4) planning for projects for FY04 and beyond; 5) responding to appeals; 6) responding to litigation, and 7) analysis, preparation and publication of the HFQLG Final Supplemental EIS. A detailed accounting of project specific expenditures is attached in Appendix C.

**Table 3. Summary of Pilot Project Use of FY03 Funds by National Forest/Unit.**

<b>Forest/Unit</b>	<b>WFHF</b>	<b>NFTM</b>	<b>NFVW</b>	<b>NFCC</b>	<b>Total</b>
Lassen	\$3.2	\$0.9	\$0.8	\$1.5	\$6.4
Plumas	\$4.5	\$0.4	\$1.3	\$3.4	\$9.6
Tahoe	\$1.4	\$0.2	\$0.1	\$0.8	\$2.5
HFQLG Implementation Team	\$1.2	\$0.3	\$0.0	\$0.0	\$1.5
<b>TOTAL PROJECT EXPENDITURE</b>	<b>\$10.4</b>	<b>\$1.8</b>	<b>\$2.2</b>	<b>\$5.6</b>	<b>\$20.0</b>
<b>12% Indirect Cost</b>	-	-	-	-	<b>\$3.1</b>
<b>Combined Transfers</b>	-	-	-	-	<b>\$2.3</b>
<b>Unobligated Balance</b>	-	-	-	-	<b>\$0.8</b>
<b>Total FY03 Budget</b>					<b>\$26.2</b>

Funds presented in millions of dollars.

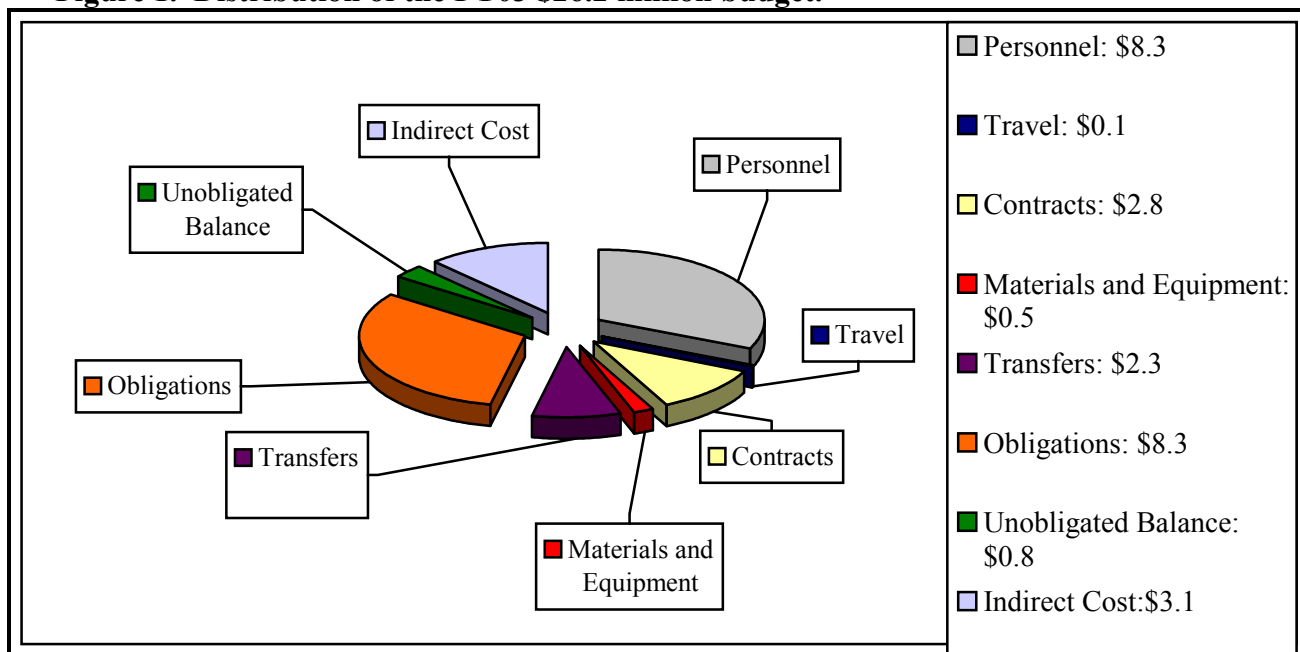
Indirect costs are described as expenses for general administration support, office space, rental agreements, communications, and other expenses. The HFQLG Act requires that indirect costs will not exceed a maximum of 12% of the HFQLG annual budget. In FY03 the 12% indirect cost was \$3.1 million.

The Combined Transfers category is described as funds that were withdrawn from the Pilot Project to contribute to the national wildfire suppression effort, and to respond to the regional request for emergency funding for the San Bernardino National Forest.

Figure 1 displays the FY03 \$26.2 million budget and expenditures. Expense categories include:

1. Personnel expenses: salaries, benefits, unemployment compensation, and other related costs to government.
2. Travel expenses: mileage, per diem, training, and long-term detail costs.
3. Contract expenses: contractual services to develop and implement resource management activities.
4. Materials expenses: supplies and other miscellaneous expenses.
5. Transfers: withdrawn funds.
6. Obligations: legally binding documents (such as contracts and agreements) and transaction liability that commit funds for purchases or services not yet received.
7. Unobligated Balance: funds that were not committed before the end of the fiscal year.
8. Equipment expenses: vehicles, capitalized equipment, contracts for equipment, etc.
9. Indirect cost: expenses for general administration support, office space, rental agreements, communications, and other expenses.

**Figure 1. Distribution of the FY03 \$26.2 million budget.**



Funds presented in millions of dollars.

Previous Fiscal Years

Table 4 displays the funding and expenditures for the Pilot Project between FY99 and FY03. In FY99 the Forest Service completed the HFQLG EIS and the Forest Supervisors signed the Record of Decision in August as required by the HFQLG Act. The FY99 implementation cost (primarily the cost of the EIS) was approximately \$2.0 million. The \$6.0 million unobligated balance was returned to the Pilot Project in FY00.

All funds were not expended in FY00, and a \$5 million unobligated balance was realized. This \$5 million was retained by the Washington office to assist in the offset of a nation-wide deficit in fire suppression.

At the end of FY01, the Regional Office approved an additional \$5.0 million in Title IV funds to cover all hazardous fuels reduction contracts ready to award, which in turn allowed for implementation of the Pilot Project to the fullest possible extent. However, there was a \$3.0 million unobligated balance in the National Forest Timber Management (NFTM) fund code and the National Forest Vegetation and Watershed (NFVW) fund code. This \$3.0 million was retained by the Washington office to assist in the offset of a nation-wide deficit in fire suppression.

At the end of FY02 the Pilot Project carried a balance of \$4.7 million. Of the \$4.7 million \$3.4 was returned to the Pilot Project, the remaining \$1.3 million was retained by the Washington office to assist in the offset of a nation-wide deficit in fire suppression.

**Table 4. Funding and Expenditures for Pilot Project During FY99 - FY03.**

	<b>Base Level Funding</b>	<b>Carry Over Funds</b>	<b>Addit- ional Funds</b>	<b>Total Available for Pilot Project</b>	<b>Indirect Cost</b>	<b>Project Imple- menta- tion</b>	<b>Total Expen- diture</b>	<b>Remain- ing Balance</b>	<b>Redirected by Washington Office</b>
1999	<b>8.0</b>		0	<b>8.0</b>	0	2.0	<b>2.0</b>	6.0	<b>0</b>
2000	<b>6.2</b>	6.0	0	<b>12.2</b>	0.8	6.4	<b>7.2</b>	5.0	<b>5.0</b>
2001	<b>26.2</b>		5.0	<b>31.2</b>	3.1	25.1	<b>28.2</b>	3.0	<b>3.0</b>
2002	<b>26.2</b>		0	<b>26.2</b>	3.1	18.4	<b>21.5</b>	4.7	<b>1.3</b>
2003	<b>26.2</b>	3.4	0	<b>29.6</b>	3.1	20.0	<b>23.1</b>	6.5	<b>0</b>
	<b>92.8</b>		<b>5.0</b>				<b>82.0</b>		<b>9.3</b>

Funds represented in millions



## Fiscal Year 2003 Accomplishments

*(C) A description of total acres treated for each of the resource management activities required under subsection (d), forest health improvements, fire risk reductions, water yield increases, and other natural resource-related benefits achieved by the implementation of the resource management activities described in subsection (d).*

### Acres Accomplished

In FY03, the Pilot Project accomplished 28 projects consisting of approximately 24,400 acres of Defensible Fuel Profile Zones (DFPZ), and 44 acres of Individual Tree Selection (ITS). There were no group selection treatments due to the management direction from the January 2001 Sierra Nevada Forest Plan Amendment. There were eleven riparian restoration projects which included restoring 537 acres, eliminating 27 miles of roads, eliminating 3 road crossings, and restoring 12 road crossings. Table 5 is a summary of these accomplishments.

**Table 5. Summary of FY03 Accomplishments.**

DFPZ Acres	GS Acres	ITS Acres	Sawlog Volume (CCF)	Biomass Volume (CCF)	Riparian Restoration Acres
24,442	0	44	41,418	44,402	537

The Pilot Project reports accomplishment when a timber sale is advertised, a service contract is awarded or a force account crew completes work on the ground. There are three types of contracts: Timber Sale (TS), Service Contract with embedded Timber Sale (STS), and Service Contract (SC). A TS is an agreement whereby a purchaser pays the Forest Service for sawlogs and biomass chips, a STS is a service contract with an embedded timber sale, and a SC is an agreement where the Forest Service pays the contractor to perform activities such as cutting and piling brush or small diameter trees with hand tools or mechanical equipment. Finally, a project can also be accomplished with a force account (FA) crew, which is a group of Forest Service employees that complete work on the ground.

In FY03, the Pilot Project advertised six timber sales (TS), awarded nine service contracts with an embedded timber sale (STS), and awarded nine service contract (SC). Force account (FA) crews accomplished four projects. Table 6 displays the cumulative FY99 through FY03 accomplishments by project type. A detailed list of FY03 projects can be found in Appendix D, the HFQLG Pilot Project Program of Work.

Sawlog volume is measured in hundred cubic feet (CCF), and is also measured in thousand board feet (MBF). To convert CCF to MBF, divide CCF by 2 CCF/MBF. In FY03, the Pilot Project offered 41,418 CCF, which is approximately equal to 20,709 MBF or 20.7 million board feet (MMBF). In general a standard log truck hauls approximately 5 MBF or 10 CCF/load. Approximately 4,000 log truck loads represent 20.7 MMBF.

Biomass is measured in CCF and is also measured in Green Tons (GT). To convert CCF to GT, multiply CCF by 2.4 GT/CCF. In FY03, the Pilot Project offered 44,402 CCF of biomass, which is approximately equal to 106,565 Green Tons. In general a chip truck typically hauls approximately 25GT or 10 CCF/load. Approximately 107,000 GT represents 4,280 chip truck loads. Table 6 summarizes all DFPZ, GS, and ITS HFQLG projects (FY99through FY03) reported as accomplished.

**Table 6. Summary of Accomplishments by Project Type: FY99 through FY03.**

PROJECT TYPE	Number of Projects	DFPZ Acres	GS Acres	ITS Acres	Sawlog Volume CCF	Biomass Volume CCF
FY99: Timber Sale	1	640	0	172	4,785	4,278
<b>FY99 TOTAL:</b>	<b>1</b>	<b>640</b>	<b>0</b>	<b>172</b>	<b>4,785</b>	<b>4,278</b>
FY00: Timber Sale	5	5,476	200	772	41,874	48,562
Service Contract with embedded TS	2	665	0	0	2,548	15,955
Service Contract	2	1,024	0	0	0	0
Force Account Crew	1	50	0	0	0	0
<b>FY00 TOTAL:</b>	<b>10</b>	<b>7,215</b>	<b>200</b>	<b>772</b>	<b>44,422</b>	<b>64,517</b>
FY01: Timber Sale	10	10,817	1,836	528	74,841	103,436
Service Contract with embedded TS	10	20,035	0	0	13,961	39,681
Service Contract	11	9,289	0	0	0	0
Force Account Crew	3	1,056	0	0	0	0
<b>FY01 TOTAL:</b>	<b>34</b>	<b>41,197</b>	<b>1,836</b>	<b>528</b>	<b>88,802</b>	<b>143,117</b>
FY02: Timber Sale	19	5,813	1,125	395	32,609	15,845
Service Contract with embedded TS	9	9,259	133	0	4,559	15,509
Service Contract	0	0	0	0	0	0
Force Account Crew	5	1,579	0	0	0	0
<b>FY02 TOTAL:</b>	<b>33</b>	<b>16,651</b>	<b>1,258</b>	<b>395</b>	<b>37,168</b>	<b>31,354</b>
FY03: Timber Sale	6	6,148	0	0	35,103	30,732
Service Contract with embedded TS	9	12,426	0	44	6,315	13,670
Service Contract	9	3,702	0	0	0	0
Force Account Crew	4	2,166	0	0	0	0
<b>FY03 TOTAL:</b>	<b>28</b>	<b>24,442</b>	<b>0</b>	<b>44</b>	<b>41,418</b>	<b>44,402</b>
<b>PILOT PROJECT TOTAL</b>	<b>106</b>	<b>90,145</b>	<b>3,294</b>	<b>1,911</b>	<b>216,595</b>	<b>287,668</b>

Map 1, in Appendix E, shows the accomplished FY03 DFPZ network.

### Riparian Restoration Projects

Eleven projects to improve forest health through riparian restoration were accomplished on 537 acres in FY03. Additionally, 27 miles of roads were eliminated, 3 road crossings were eliminated and 12 road crossings were restored. Riparian or watershed restoration projects are considered accomplished when a service contract is awarded or force account crew completes the work on the ground. The FY03 riparian restoration activities included meadow restoration and enhancement, stream channel improvement, road relocation, road closure, slope stabilization, and aspen enhancement. Map 3, in Appendix E, shows the locations of these riparian restoration projects.

### On the Ground Treatments

Through Fiscal Year 2003, the Pilot Project accomplished 106 projects for 90,145 acres of DFPZs, 3,294 acres of GS, and 1,911 acres of ITS. The Pilot Project has accomplished 51 riparian restoration projects for 2,400 acres. Most projects, though reported as accomplished, have contracts that extend for several years. Thus, the number of acres *treated* on the ground each year through the activities of harvest, prescribed fire, and riparian restoration work varies and are not the same as the acres reported as *accomplished* each year. Out of the 106 DFPZ and GS projects reported as accomplished (or under contract), on-the-ground treatments have begun on sixty-three.

Multiple activities often occur on any given acre. Activities within the boundary of a DFPZ project commonly include mechanical harvest or hand thinning with chainsaws. Fuel treatments include machine piling, hand piling, pile burning and prescribed burning (also known as broadcast burning). The DFPZs that have trees removed or harvested commonly require a fuels treatment as a follow up to harvest in order for the DFPZ to be effective. For example the Eagle Lake Ranger District (ELRD) has 16,661 acres of DFPZs under contract. At the end of FY03, 4,311 acres have been harvested either by mechanical equipment or by hand with chainsaws. Additionally, on those 16,661 acres of DFPZ under contract (or accomplished), 2,708 acres of fuels treatments have taken place. Table 7 summarizes on-the-ground treatments that have taken place between FY00 and FY03:

**Table 7. Summary of On-the-Ground Treatments by Ranger District, FY00 to FY03.**

<b>District</b>	<b><i>Accomplished DFPZ Acres</i></b> (i.e. under contract)	<b>Treated DFPZ Acres</b> (mechanical or hand)	<b>Treated DFPZs Acres</b> (with Fire)	<b><i>Accomplished GS Acres</i></b> (i.e. under contract)	<b>Treated GS Acres</b> (mechanical)	<b><i>Accomplished ITS Acres</i></b> (i.e. under contract)	<b>Treated ITS Acres</b> (mechanical or hand)
ALRD	3,459	1,948	116	0	0	0	0
ELRD	16,661	4,311	2,708	706	682	849	635
HCRD	17,475	5,244	300	1,400	34	0	0
BRD	21,730	5,948	5,311	811	98	318	322
FRRD	10,561	436	50	0	0	0	0
MHRD	12,718	7,102	5,794	0	0	0	0
SVRD	7,541	2,363	715	377	187	744	1,512
	<b>90,145</b>	<b>27,954</b>	<b>14,994</b>	<b>3,294</b>	<b>1,001</b>	<b>1,911</b>	<b>1,867</b>

The Almanor (ALRD), Eagle Lake (ELRD), and the Hat Creek (HCRD) Ranger Districts are in the Lassen National Forest. The Beckworth (BRD), Feather River (FRRD), and the Mount Hough (MHRD) Ranger Districts are in the Plumas National Forest. The Sierraville Ranger District (SVRD) is in the Tahoe National Forest.

A detailed list of projects and their associated on-the-ground treatments can be found in Appendix D: HFQLG Pilot Project Program of Work (p.17).

### Monitoring

Other natural resource-related benefits associated with the Pilot Project are validated through monitoring the activities required by the HFQLG Act. Additionally, Pilot Project monitoring will facilitate the Final Report as required the Act (Sec. 401(k)(1)). More details about the Final Report can be found in the Act located in Appendix A.

The HFQLG Pilot Project Monitoring Plan was initiated in FY00 and provides a structure, in the form of questions, to gain information about 1) habitat concerns; 2) effects of implementing Pilot Project activities; 3) effectiveness of those activities, and 4) economic well-being. The Monitoring Plan, which includes a full description of these questions and their monitoring protocols, is available at the Pilot Project office located at the Plumas National Forest Supervisors Office.

The Habitat Concerns section includes methods to assess habitat connectivity, old forest habitat and aquatic/riparian dependent species monitoring. This section meets the requirement in the 1999 HFQLG ROD that states that “over the course of the Pilot Project, suitable habitat for old forest-dependent species and aquatic/riparian-dependent species (including amphibians) shall not be reduced by more than ten percent below 1999 levels.”

The Implementation Monitoring section has three levels of assessment: project evaluations, interagency project reviews, and topic specific questions. This section provides information about the degree to which treatments are implemented according to standards and guidelines set forth in the HFQLG EIS, each forest’s land management plan, and site-specific direction. There are ten topic specific questions concerning forest structure, best management practices, soil quality, sensitive plants, noxious weeds, and air quality. These questions include information on objectives, scale, monitoring protocol, and estimated cost.

In the Effectiveness Monitoring section, twenty-one topic specific questions address: 1) old forest values and old forest-dependent species; 2) watershed effects; 3) wildfire protection and fuels reduction; 4) threatened, endangered, and sensitive plants, and 5) noxious weeds. These questions assess the degree to which implemented treatments meet resource objectives. All the topic specific questions also include information on objectives, scale, monitoring protocol, and estimated cost.

The Economic Well-Being section has been contracted to the Center for Economic Development, in Chico, CA. to collect and analyze data.

The following are summaries of FY03 monitoring activities and results:

**Habitat Concerns:** The HFQLG Record of Decision (ROD) requires that habitat connectivity be maintained to allow movement of old forest or aquatic/riparian-dependent species between areas of suitable habitat. It further requires that suitable habitat for old forest-dependent species and aquatic/riparian-dependent species shall not be reduced by more than 10% below 1999 levels. California Wildlife Habitat Relationship (CWHR) labels 5M, 5D, and 6 are used to represent habitat required by old forest-dependent species.

Each project is evaluated to determine the reduction, if any, in the vegetation strata in CWHR labels 5D, 5M and 6. The vegetation strata CWHR size class 5 represents a single-story, predominantly large tree (greater than 24-inch Diameter at Breast Height (DBH) stand. Density class D has a 60-100% canopy cover and density class M has a 40-59% cover. CWHR size class 6 represents a multi-layered stand where CWHR size class 5 is over a distinct layer of size class 4 (11" - 24" DBH) or size class 3 (6" - 11" DBH) and where total tree canopy is 60% or greater.

Reductions are documented and a cumulative total is tracked to make sure no greater than a 10 percent reduction occurs over the life of the Pilot Project. To date less than 1 percent of the acres accomplished have resulted in a reduction.

**Implementation and Effectiveness Monitoring:** In FY03, project evaluations were combined with interagency reviews as each district conducted at least one on-site evaluation of at least one of the projects implemented within the last year. These included vegetation management or riparian/watershed improvement projects. The reviews took place at the project site and specialists from other agencies as well as the public were invited to participate. The primary purpose of these reviews is for District Rangers to interact with the inter-disciplinary team to make an on-site assessment of the outcomes from the various treatments. In FY03, eight project evaluation/interagency reviews took place. These reviews are documented, signed by the District Ranger and kept in the monitoring project file.

## Topic Specific Questions:

Forest Service and contracted personnel collected the pre-treatment data for both the implementation and effectiveness monitoring questions. The information gathered includes:

### **Stand structure attributes** (Questions 1-4):

Information regarding tree size, canopy cover, surface fuels, ladder fuels, and understory structure and composition has been collected from 70 units, randomly selected across the Pilot Project. This will serve as baseline data from which post harvest conditions will be compared. The distribution of the plots across the districts is proportional to the amount of DFPZ to be constructed on each district. Most of the implementation projects consist of a mechanical or hand treatment followed by prescribed burning. The first stage of work has been completed in many of the units.

### **Best Management Practice (BMP) Implementation and Effectiveness During Project Activities** (Questions 5 and 21):

Six BMPs were selected for on-site evaluations. They are Streamside Protection (T01), Timber Skid Trails (T02), Timber Landings (T04), Roads and Road Crossings (E08-09), Road Decommissioning (E10), and Prescribed Fire (F25). Approximately 30 randomly selected units were evaluated for each BMP. The following summarizes the results:

- Based on the composite scores for implementation and effectiveness, implementation ranged from 78% (prescribed fire) to 100% (road decommissioning). Effectiveness results ranged from 91% (stream course protection and prescribed fire) to 100% (road crossings and road decommissioning). Overall, 86% of evaluations were rated as “implemented” and 95% as “effective”.
- A key effectiveness criterion relative to water quality is evidence of sediment transport to a channel. This criterion is included in all the evaluations conducted for HFQLG except road crossings and road decommissioning. Of the 169 evaluations that included this criterion, sediment to channel was found at 7 sites (4.1 percent).

### **Soil Quality Standards** (Question 6):

Information on soil density, soil displacement, soil cover, and large woody material has been collected from 36 units, randomly selected across the Pilot Project. Twenty-six units will be treated with DFPZ prescriptions and 10 units will be treated with group selection prescriptions. This data will serve as the baseline from which post harvest conditions will be compared when the same transects are resampled. The following is a summary of the results of this years’ soil quality monitoring:

- *Soil Compaction*: The threshold that indicates a significant impairment to soil productivity is 15 percent or more of an activity area having detrimental compaction. Based on FY03 baseline monitoring of existing condition (legacy compaction), 8 percent of the units had detrimental compaction. Fifty-six percent of the units had a lesser level of detrimental compaction, and the remaining 36 percent had no detrimental compaction.
- *Soil Displacement*: The threshold for detrimental displacement is loss of either 2 inches or ½ (if total depth is less than 2”) of the humus-enriched topsoil, from a 1-meter square or larger area. Fourteen percent of the units monitored in FY03 have more than 10 percent displacement within the unit.

- *Soil Cover*: The threshold is for fine organic matter to occupy over 60 percent of an area. Sixty percent of the group selection units met the standard and 96 percent of the thinning units met the standard.
- *Large Woody Material*: The standard is for 5 logs/acre, at least 20 inches in diameter and 10 feet long. Of the 10 group selection units 1 had no large wood and 6 units had 5 or more large logs/acre in all decomposition classes. The highest amount was 24 logs/acre with an average of 8.2 logs/acre. Of the 26 thinning units 23 units had 5 or more logs/acre in all decomposition classes. The highest amount was 31 logs/acre and the average was 14.5 logs/acre.

**Threatened and Endangered Species (TES) plants and noxious weeds (Questions 7 and 8):**

Implementation monitoring of sensitive plant resource areas and noxious weed areas was initiated. The purpose was to gauge the success of implementing the resource management activities as designed. The following is a summary of the results of this years' TES plants and noxious weeds monitoring:

- *Sensitive Plants*: Twenty-three plant occurrences were monitored. Nineteen occurrences required avoidance. Ten plant occurrences were avoided and 9 were impacted against prescription. Plant protection plan documentation needs to be improved. This can be corrected by assurance that the botanist properly prepares a sensitive plant protection plan with maps of areas to be protected and provides a complete copy of the botany project files. A critical step is for the botanist and contract administrator to ensure they agree that the contract maps adequately depict where protection areas are.
- *Noxious Weeds*: Seventeen units had occurrences of noxious weeds documented in the project record. All units had proper enforcement of noxious weed policy. Contract administrators maintained copies of equipment cleaning documentation in their contract folders.

**Smoke Management (Question 9):**

Ten projects on the Plumas NF were implemented in accordance with the Forest's Smoke Management Plan (SMP). Over approximately 67 days of prescribed burning there were no smoke impacts to a smoke sensitive area. There were no complaints. No Class I Airsheds were impacted. Three projects on the Sierraville RD were implemented in accordance with their SMP. Over approximately 16 days of prescribed burning there were no smoke impacts to a smoke sensitive area. No Class I Airsheds were impacted. Two projects on the Lassen NF were implemented and complied with the Forest's SMP. Over approximately 8 days of prescribed burning there were no smoke impacts to a smoke sensitive area. No Class I Airshed was impacted.

**Protection of Small Aquatic Habitats (Question 10):**

Both presence/absence and disturbance evaluations were conducted on 30 randomly selected units for springs, seeps, or other small aquatic habitats. First, project maps were checked to determine whether any of these features were identified during project planning. Then the units were assessed in the field to determine if identified features were protected and whether any other features detected in the field were protected. No additional features were found and all identified features were protected.

**California Spotted Owl (Questions 11-14):**

The mitigation in the 1999 HFQLG ROD required “At the site-specific project level, defensible fuel profile zones, group selection harvest areas, and individual tree selection harvest areas will be designed and implemented to completely avoid suitable California spotted owl habitat, including nesting habitat and foraging habitat”. Hence, limited project activities have occurred within these habitats since the January 2001 Sierra Nevada Forest Plan Amendment replaced the mitigation. In FY02 and FY03, intensive surveys of owls have commenced as part of the Plumas/Lassen Administrative Study. The surveys will be conducted to elicit territorial responses. Follow-up visits will be conducted following all detections to determine status (nonterritorial single, territorial single, pair, reproductive pair) and reproductive success. Territories will be monitored annually to determine occupancy and reproduction.

**Abundance and Distribution of Forest Carnivore Habitat (Question 15):**

In 2001, researchers from the Pacific Southwest Experiment Station (PSW) selected three large landscapes to check for presence or absence of forest carnivores using the track-plate inventory method. Researchers placed 150 track plates in three separate areas, with the goal of determining presence or absence of American pine marten. No marten were detected. PSW researchers were unable to continue the effort in FY02 and collected no additional data. This condition remained static in FY03.

**Landbird Surveys (Question 16):**

Landbird monitoring is being completed through a Challenge Cost/Share agreement with Point Reyes Bird Observatory (PRBO). Fourteen Transects have been established on the Almanor Ranger District of the Lassen National Forest to track species diversity over time. Data collection must occur over a period of years before correlations can be made between treatment and bird populations. To date, the monitoring of areas treated has remained within units that predate the Sierra Nevada Forest Plan Amendment. The units are typically young timber stands that are either dense without an understory or with a heavy shrub component.

Current data shows that dense fir forests have few of the habitat characteristics preferred by the majority of migratory landbirds. Treatment of shrub habitats associated with HFQLG actions did contribute to a decline in species richness and abundance within the treated area. In one area, treated in the fall of 2000, species richness and diversity declined in 2001, but showed an increase in 2002 indicating that treatment of young stands has a temporary effect on nesting attempts and success. Further data collection will help to corroborate the theory that thinning dense stands (generating a more open canopy) increases bird richness and diversity.

The highest level of bird use continues to be within the riparian habitats, which remain largely untouched by HFQLG projects. This year a Swainson’s thrush was found on the Almanor Ranger District, the first time this riparian-adapted species has been found on the Lassen National Forest.

Two fires have also been monitored for bird response. Surveys have shown that there bird abundance and richness is highest immediately following a fire and declines following the first year.

**Effect of Activities on Indicators of Watershed Condition (Question 17):**

No data has yet been assimilated.

**Trends in Channel Conditions, Riparian Attributes, and Macro-invertebrates in Sub-watersheds with High Concentrations of HFQLG Activities (Questions 18 and 19):**

Twenty-four streams on the Lassen, Plumas and Tahoe National Forests were surveyed during the 2003 field season (see Table 1). Eleven streams were surveyed for baseline data in 2003 prior to project implementation. Three streams (Upper Butte, Scotts John Creek and Little Antelope Creek) were measured post-project to compare condition to pre-HFQLG condition. Ten of the 24 were replicated reference streams. Though classified as a reference, Cottonwood (Tahoe) was sampled to assess recovery from wildfire since the stream was originally monitored in 1998 (Forest Health Pilot Monitoring). Squaw Queen was surveyed twice during the 2003 field season to determine the margin of error associated with surveyors.

Results from monitoring conducted before and after HFQLG activities showed no major changes at the two sites (Upper Butte and Scotts John Creeks) monitored in 2003. Likewise, reference reaches showed relatively minor changes from previous years for most attributes, but substantial changes for some attributes, notably residual pool depth and bank stability. Measurements from the site replicated in 2003 showed substantial differences in bank stability and particle counts. These attributes will be stressed in future training sessions. Amphibian work was accomplished under a cooperative agreement with the California Academy of Sciences (CAS). Herpetologists from CAS surveyed 24 sites within the QLG project area. Their report was not available in time for this report.

**Water Yield and Soil Moisture (Question 20):**

Four separate locations will be selected for collecting pre-harvest soil moisture. Each year one of the locations is selected for sampling. In FY02 the second of four locations for pre-harvest soil moisture was measured on the Almanor Ranger Districts' Prattville DFPZ project. This baseline data will be compared to post harvest conditions. The Pilot Project will award a contract to model water yield when the data is available.

**Amphibian Persistence (Question 22):**

Forty-six streams across the Pilot Project were selected and surveyed for the presence of amphibians. These streams are resurveyed every other year of the Pilot Project to check for species persistence.

**Trend in Large Fire Frequency (Question 23):**

There has not been an opportunity to collect data on this question.

**Trend in Severity of Large Fires on Acres Burned (Question 24):**

There has not been an opportunity to collect data on this question.

**Effect of Treatments on Fire Behavior and Suppression (Question 25):**

There has not been an opportunity to collect data on this question.

**Prescribed Fires Activities and Air Quality Standards (Question 26):**

Over the Pilot project, Stationary Air Quality Management District monitors did not record any violations of air quality associated with any prescribed burns. No smoke sensitive area was impacted. No portable recorders were set-up in any smoke sensitive areas. Based on previous data recorded from prescribe burn projects and wildfires it is unlikely standards were exceeded.

**Prescribed Fires and Nuisance Complaints in Terms of Air Quality (Question 27):**

The Plumas NF burned 4,280 acres over a 67-day period. No complaints were registered. The Sierraville Ranger District burned approximately 399 acres over a 16-day period. There were no complaints. The Lassen NF burned two projects consisting of 107 acres. There were no complaints.



**Response of TES Plant Species Response to Resource Management Activities (Question 28):** This monitoring commences three years after a project has been completed. That time has not been reached for any HFQLG project.

**Elimination or Containment of New and Existing Noxious Weeds (Question 29-31):**

This monitoring commences three years after a project has been completed. That time has not been reached for any HFQLG project.

## **Environmental Impacts**

The HFQLG Pilot Project seeks to improve environmental health with prescribed silviculture treatments and riparian restoration projects. The HFQLG Monitoring Plan provides guidance for identifying and monitoring any adverse environmental impacts caused by HFQLG projects. Section (j)(1)(G) of the HFQLG Act requires:

*(G) A Description of any adverse environmental impacts from the pilot project.*

Sixty-three DFPZ and GS projects have undergone some level of construction/harvest between FY00 and the end of FY03. Monitoring has begun to track effects of some of these operations. Pretreatment data on vegetative conditions, soil quality standards, landbird surveys, forest carnivores, Threatened and Endangered Species, plants and noxious weeds, stream attributes, soil moisture, and amphibian persistence were collected. When field operations and subsequent burning are completed, follow-up monitoring will document resulting changes. All work will be conducted at a level commensurate with available funds. To date, no adverse environmental impacts have been documented.

## **Economic Benefits, Revenues and Expenditures**

### Economic Benefits

Section (j)(1)(D) of the HFQLG Act requires:

*(D) A description of the economic benefits to local communities achieved by the implementation of the pilot project.*

The Forest Service contracted with the Center for Economic development (CED) to monitor socioeconomic conditions in local communities impacted by the HFQLG Act and to make a preliminary determination as to the extent to which implementation of the Act influenced local socioeconomic performance. This year's report is located in Appendix F. Previous HFQLG socioeconomic monitoring reports focused on county-level data, which was the most readily-available local area for which socioeconomic data was available. However, a county consists of at least several communities and if a community does experience a socioeconomic benefit due to the implementation of the HFQLG Act, the socioeconomic measurement may be drowned out by changes in other communities in the same county. Keeping this in mind and beginning with FY03, CED monitored socioeconomic change in nine communities described below. The communities listed are Bieber, Susanville, Chester, Greenville, Quincy, and Loyalton as communities that are "highly dependent" on the forest products industry. To enable the study of a congruent area, CED included the communities of Burney, Westwood, and Portola. These communities, combined with their larger market areas, are defined in this report as follows:

- **Bieber** includes the Big Valley communities of Adin, Bieber, Lookout, and Nubieber. *Population: 1,774.*

The smallest community in the project area, Bieber suffers from the decline of the livestock and timber industries in the 1990s. This community had been hit hard by heavy job losses and has been in economic decline since 1998.

- **Burney** includes the Hat Creek and Fall River Valley communities of Burney, Cassel, Fall River Mills, Hat Creek, McArthur, and Old Station. *Population: 8,863.*

Burney had been successful in attracting small employers outside of the forest products and tourism industries. This was fortunate because the forest product and tourism industries, themselves, have been in decline here. Overall economic growth has been positive in Burney since 1998.

- **Susanville** includes the Honey Lake Valley communities of Janesville, Litchfield, Milford, Standish, Susanville, and Wendel. *Population: 19,055 (not including incarcerated persons).*

The economic impact of the High Desert State Prison exceeded its threshold in the late 1990s, meaning that too many businesses moved to this community to serve the local market. The largest community in the project area, Susanville is now in decline as excess businesses shut down and lay off workers. The community has been in decline since 1998.

- **Westwood** includes Westwood and the Peninsula and the east shore of Lake Almanor. *Population: 4,251.*

By 2001, Westwood had started to gear up for the anticipated development of the Dyer Mountain ski resort. Tourism employment had started to increase, with added increases in construction employment, total jobs increased in Westwood since 1998.

- **Chester** includes Chester, Mill Creek, and Mineral. *Population: 2,747.*

Chester's tourism sector was growing with continued development in the Lake Almanor area. This community has also been successful at attracting non-tourism/forest product businesses recently. Overall, Chester has experienced significant economic growth since 1998. Mill Creek and Mineral are isolated communities in the project area, but together, they were too small to be analyzed separately. Thus, they were included in the nearest community, which is Chester.

- **Greenville** includes the Indian Valley communities of Crescent Mills, Greenville, and Taylorsville, and also includes Canyon Dam on Lake Almanor. *Population: 2,831.*

Greenville was one of the first communities hit in the late 1980s by cutbacks in the lumber industry. However, the community had started to recover, evidenced by small increases in tourism and construction employment, leading to an increase in overall employment since 1998.

- **Quincy** includes the Central Plumas County communities of Belden, Meadow Valley, Quincy, and Twain. *Population: 6,475.*

Quincy has been experiencing a decline in private industry since 1998 and has been one of the hardest hit communities in the project area, second only to Bieber. The community has attracted a few high-end service establishments, but as of yet, this has not been enough to offset losses in forest products, tourism, and health care.

- **Portola** includes the Upper Middle-Fork Feather River communities of Beckwourth, Blairsden, Clio, Graeagle, and Portola. *Population: 6,277.*

Portola has seen the most economic success in the project area since 1998. This was the only community that had gained forest product industry employment. Retail and high-end service employment had declined here since 1998, but this was more than offset by gains in construction, local services, and real estate. Graeagle, in particular, was responsible for many of the local gains in real estate. Increasingly, Portola is serving commuters to the Reno area.

- **Loyalton** includes the Sierra Valley communities of Calpine, Chilcoot, Loyalton, Sierraville, and Vinton. *Population: 2,828.*

Loyalton is in a transition phase as the area is becoming more attractive to Reno commuters. Employment in construction, retail trade, and high-end services is increasing, but are offset by decreasing employment in forest products resulting in an undetermined conclusion regarding the overall job trend (although it is more likely that total jobs have decreased since 1998).

### Businesses by Employee Size by Industry (Industry Growth)

The forest products industry can be found within three sectors: 1) forestry, fishing, hunting, and agriculture; 2) manufacturing; and 3) transportation and warehousing. Growth in these industries combined may mean growth in the forest products industry. With the exception of livestock, little other economic activity occurs in these three sectors in the project area that was not related to the forest products industry (Table 8).

**Table 8 – Change in Forest Product Industry Establishments by Employee Size, 1998-2001.**

Employee-size	Bieber	Burney	Susanville	Westwood	Chester	Greenville	Quincy	Portola	Loyalton	Pilot Project Area Total
1-4	-1	-11	-3	-1	0	-3	-3	1	-3	-24
5-9	2	4	0	1	1	1	0	0	0	9
10-19	0	0	0	-1	-2	1	0	2	-1	-1
20-49	0	0	0	0	0	-1	-2	0	0	-3
50-99	-1	-1	0	0	0	0	0	0	1	-1
100-249	0	0	0	0	0	0	0	0	-1	-1
250-499	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>-8</b>	<b>-3</b>	<b>-1</b>	<b>-1</b>	<b>-2</b>	<b>-5</b>	<b>3</b>	<b>-4</b>	<b>-21</b>
Change in jobs, high estimate	-48	-50	-6	-6	-17	-8	-60	37	-68	-264
Change in jobs, median estimate	-63	-74	-8	-10	-22	-21	-77	32	-122	-364
Change in jobs, low estimate	-78	-99	-10	-14	-28	-34	-94	27	-176	-465
Job growth trend	Negative	Negative	Negative	Negative	Negative	Negative	Negative	<b>Positive</b>	Negative	Negative

Source: U.S. Department of Commerce, Bureau of the Census, Zip Code Business Patterns

Change in forest product industry employment reflects the declining status forest products have as an economic force in the region. Three lumber mills in the Pilot Project Area have shut down since 1998, one each in Bieber, Burney, and Loyalton.

The tourism sector includes three industries: 1) retail trade; 2) arts, entertainment, and recreation; and 3) accommodation and food services. Retail is included because this sector draws a significant portion of its income from tourist spending (Table 9).

**Table 9 – Change in Tourism Industry Establishments by Employee Size, 1998-2001.**

Employee-size	Bieber	Burney	Susanville	Westwood	Chester	Greenville	Quincy	Portola	Loyalton	Pilot Project Area Total
1-4	-1	-7	-7	-5	1	1	2	-3	2	-17
5-9	-1	-3	-5	1	6	4	-5	-3	-2	-8
10-19	0	3	-3	1	-3	-3	4	3	2	4
20-49	0	-2	-1	0	-1	1	-2	1	0	-4
50-99	0	0	0	0	1	0	0	0	0	1
100-249	0	0	-2	0	0	0	0	0	0	-2
250-499	0	0	1	0	0	0	0	0	0	1
<b>Total</b>	<b>-2</b>	<b>-9</b>	<b>-17</b>	<b>-3</b>	<b>4</b>	<b>3</b>	<b>-1</b>	<b>-2</b>	<b>2</b>	<b>-25</b>
Change in jobs, high estimate	-8	-35	56	16	74	41	-11	69	28	129
Change in jobs, median estimate	-10	-64	-105	9	41	22	-41	50	20	-79
Change in jobs, low estimate	-12	-94	-266	2	8	3	-71	31	12	-287
Job growth trend	Negative	Negative	Undetermined	Positive	Positive	Positive	Negative	Positive	Positive	Undetermined

Source: U.S. Department of Commerce, Bureau of the Census, Zip Code Business Patterns

**Table 10 – Change in All Private Sector Establishments by Employee Size, 1998-2001.**

Employee-size	Bieber	Burney	Susanville	Westwood	Chester	Greenville	Quincy	Portola	Loyalton	Pilot Project Area Total
1-4	-1	-8	-4	-9	6	1	5	26	7	23
5-9	-1	3	-7	2	12	4	-6	3	-3	7
10-19	2	4	-9	2	-6	-1	3	7	3	5
20-49	0	-1	-1	1	2	0	-10	-1	0	-10
50-99	-2	1	0	0	1	0	4	0	1	5
100-249	0	0	-2	0	0	0	-1	1	-1	-3
250-499	0	0	1	0	0	0	0	0	0	1
<b>Total</b>	<b>-2</b>	<b>-1</b>	<b>-22</b>	<b>-4</b>	<b>15</b>	<b>4</b>	<b>-5</b>	<b>36</b>	<b>7</b>	<b>28</b>
Change in jobs, high estimate	-99	137	-25	76	213	23	-33	411	5	401
Change in jobs, median estimate	-130	99	-199	55	156	16	-208	328	-60	58
Change in jobs, low estimate	-161	62	-373	35	99	9	-383	245	-125	-286
Job growth trend	Negative	Positive	Negative	Positive	Positive	Positive	Negative	Positive	Undetermined	Undetermined

Source: U.S. Department of Commerce, Bureau of the Census, Zip Code Business Patterns

Economic growth in the Pilot Project Area has been mixed. Economic growth was occurring in Burney, the Lake Almanor community of Chester and its neighbors, Westwood and Greenville, and in Portola. Economic decline was happening in Bieber and in the two county seats in the Pilot Project Area, Quincy and Susanville (Table 10).

There was a correlation between overall economic growth and growth in the tourism industry. Four of the five communities experiencing overall economic growth experienced growth in tourism. There was little correlation between forest product industry growth and overall economic growth. Only one community experienced job growth in the forest products industry, Portola. Portola also experienced the greatest overall economic growth. That may be due to a number of factors, including the increasing popularity of Portola as a commuter town for Reno.

### **Non-Locally Owned Businesses**

The ability to get local dollars to be spent within the community is vital to a region's ability to capture economic impact. Establishments of locally-owned businesses are more likely to spend dollars within the community than establishments that are not locally-owned. A locally-owned establishment is defined in this analysis as an establishment that describes itself as a single location or a headquarters for its business, and not a branch location or a subsidiary for another business. An establishment is a physical location in which a business is operating. One business may have several establishments. For example, Sierra Pacific Industries is a business with many establishments. Some of their establishments are located in the Pilot Project Area (Quincy, Susanville, and Loyalton, for instance). However, their headquarters is located in Anderson. Therefore, Sierra Pacific is considered to be a non-locally owned business.

Overall, nearly 3 out of 10 employees in the Pilot Project Area work in establishments that are not locally owned. This affects the region's ability to capture economic impact of a project like the HFQLG Pilot Project. More than 3 out of 10 employees in Burney, Chester, Quincy, Loyalton, and Susanville work in establishments that are not locally owned. While employees are likely to spend a portion of their income locally, most other business expenses are made in the community in which their headquarters is located. Therefore, communities in the Pilot Project Area will have a difficult time keeping business revenue, including timber sale and service contract dollars, circulating in the local community. The communities with the greatest percentage of employees in establishments that are locally owned are Bieber and Portola. These communities will have an easier time capturing local economic impact.

Manufacturing and transportation have the greatest share of employees in businesses that are not owned locally. Both of these industries are largely involved in the forest products industry. This means that communities within the project area are going to have a more difficult time capturing economic impact from increasing activity in the forest product industry than activity from other industries or sectors.

### **Forest Products Industry Roster (FPIR)**

The FPIR survey shows that most forest product-based businesses located in the Pilot Project Area rely on most if not all of their work and/or forest products from outside the Pilot Project Area. Forest product-related businesses in Burney, Susanville, Chester, and Quincy rely on the Pilot Project Area for between 10 and 80 percent of their work. Loyalton's forest product-related businesses are less dependent on forest products from the Pilot Project Area (Table 11).

**Table 11 – Change in Forest Product Industry Employment and Sales, 2001-2003**

	Bieber	Burney	Susanville	Westwood	Chester	Greenville	Quincy	Portola	Loyalton	Pilot Project Area Total
Responding Organizations	1	11	3	5	3	1	6	3	4	37
Change in Full-time Year-round Jobs	n/a	-10	-4	0	5	n/a	-9	-1	0	-21
Change in Part-time Year-round Jobs	n/a	3	-2	-1	10	n/a	1	-1	-1	9
Change in Full-time Seasonal Jobs	n/a	27	-17	-3	0	n/a	12	-19	25	31
Change in Average Season Length (mos.)	n/a	0.3	5.7	-3.5	1.0	n/a	0.2	3.0	-0.4	0.4
Change in Total Jobs in January	n/a	26	-3	5	-32	n/a	-9	-2	-23	-33
Change in Total Jobs in July	n/a	-1	-4	-4	-31	n/a	-12	-24	7	-57
Change in July Jobs w/o Benefits	n/a	34	-19	-23	4	n/a	2	-2	-19	-26
Change in July Vacancies	n/a	2	-3	7	4	n/a	-3	0	-34	-27
Total Annual Revenue, 2001 (1,000s)	n/a	\$ 2,800	\$ 1,300	n/a	\$ 3,600	n/a	\$ 3,100	n/a	\$ 150	\$ 11,300
Total Annual Revenue, 2003 (1,000s)	n/a	\$ 3,220	\$ 950	n/a	\$ 3,375	n/a	\$ 3,100	n/a	\$ 50	\$ 11,090
Pct. of revenue from Pilot Project Area, 2001	n/a	36.2 %	28.8 %	n/a	9.4 %	n/a	30.3 %	n/a	8.3 %	21.2 %
Pct. of revenue from Pilot Project Area, 2003	n/a	47.2 %	34.5 %	n/a	81.6 %	n/a	16.5 %	n/a	0.0 %	44.6 %
Revenue from Pilot Project Area, 2001 (1,000s)	n/a	\$ 1,014	\$ 375	n/a	\$ 338	n/a	\$ 938	n/a	\$ 13	\$ 2,399
Revenue from Pilot Project Area, 2003 (1,000s)	n/a	\$ 1,520	\$ 328	n/a	\$ 2,753	n/a	\$ 510	n/a	\$ 0	\$ 4,946

*Source: 2003 Forest Product Industry Roster Survey*

*Note: n/a represents fewer than two respondents submitting data for this community.*

General comments from the respondents were much more pessimistic about the future than in 2001. The traditional forest product industry was shrinking as evidenced in Table 1. More mills were closed and more operators were out of business or downsizing. More forest product workers are going farther from home to find work. Numerous workers complained that travel costs affected them more and affect their families. At least six individual operators reported traveling all the way to Lake Arrowhead in Southern California to harvest salvage timber. The price of fuel, workman's compensation, increases in Canadian imports, and lack of USFS logs being cited by many as making business in the local forest product industry difficult. Many said they were just hanging on or operating in the red. In 2001, the situation was not favorable either, but the 2003 survey yielded more desperate comments. Based on the FPIR survey, most sales based on forest products from the Pilot Project Area in 2003 occurred in businesses located in Chester. Operators located in Burney and Quincy purchased most sales in 2001 based on forest products from the Pilot Project Area.

**HFQLG Timber Harvested by Location of Purchaser**

Most HFQLG timber harvest in 2003 was done so by establishments located in the Pilot Project Area. Local contractors harvested 26,323 hundred cubic feet (CCF) of HFQLG timber valued at \$441,796 (Table 12). Data for this section was provided by the Forest Service by establishment in which the

primary contact for the project was located. An establishments is one physical location in which a business operates, and a business can have more than one establishment. For example, a timber sale to Sierra Pacific Industries where the business contact attached to the contract was located in Quincy was considered to be a timber sale to the Pilot Project Area, although some of the timber sold may have actually been processed outside of the Pilot Project Area.

**Table 12 – HFQLG Timber Harvested by Local Contractors, October 2002 – September 2003**

	Bieber	Burney	Susanville	Westwood	Chester	Greenville	Quincy	Portola	Loyalton	Pilot Project Area Total
Volume Harvested (CCF)	992	0	6,695	0	8,145	170	9,531	484	306	26,323
Value Harvested \$	248	0	314,614	0	35,247	1,604	88,221	121	1,741	441,796

A greater price per CCF of timber was paid by establishments located inside the Pilot Project Area than by establishments located outside the Pilot Project Area. The average value of timber sold to establishments in the Pilot Project Area was \$16.78 per CCF, while establishments outside of the area paid an average of \$14.60 per CCF (Table 13).

**Table 13 – All HFQLG Timber Harvested, October 2002 – September 2003**

	Timber Removed by Contractors Within Pilot Project Area	Timber Removed by Contractors Outside Pilot Project Area	Total Timber Sold	Percent of Timber Harvested in Pilot Project Area
Volume Harvested (CCF)	26,323	35,487	61,810	43%
Value Harvested	441,796	518,245	960,041	46%
Value per CCF	\$16.78	\$14.60	\$15.53	

### HFQLG Service Contracts by Location of Contractor

Fewer than 1 out of 5 dollars in contracts awarded for work on implementation of the HFQLG Act had been contracted to local companies in the Pilot Project Area. This had amounted to more than \$4.75 million since 2000 (Table 14).

**Table 14 – HFQLG Service Contracts Awarded in the Pilot Project Area**

Year	Bieber	Burney	Susanville	Westwood	Chester	Greenville	Quincy	Portola	Loyalton	Pilot Project Area Total
FY 2000	\$ 0	\$ 0	\$ 0	\$ 21	\$ 0	\$ 0	\$ 25	\$ 0	\$ 261	\$ 308
FY 2001	\$ 0	\$ 371	\$ 16	\$ 65	\$ 495	\$ 895	\$ 770	\$ 179	\$ 0	\$ 2,791
FY 2002	\$ 496	\$ 198	\$ 0	\$ 63	\$ 0	\$ 307	\$ 38	\$ 0	\$ 0	\$ 1,102
FY 2003 (through July)	\$ 0	\$ 136	\$ 0	\$ 48	\$ 0	\$ 117	\$ 189	\$ 83	\$ 0	\$ 573
Community Total	\$ 496	\$ 704	\$ 16	\$ 198	\$ 495	\$ 1,319	\$ 1,022	\$ 261	\$ 261	\$ 4,775

The proportion of contract value awarded to local companies had changed little year-to-year since 2000, although local contractors were awarded a high of 23.7 percent of contract value though July in 2003. In every fiscal year, greater awarded contract values translated to more contract dollars awarded to companies in the Pilot Project Area. This shows that total value was a greater determinant of local impact than proportion of contracts (Table 15).

**Table 15 – All HFQLG Service Contracts Awarded**

Year	Contracts Awarded Within Pilot Project Area	Contracts Awarded Outside Pilot Project Area	Total Contracts Awarded	Percent of Contracts Awarded in Pilot Project Area
FY 2000	\$ 308	\$ 1,057	\$ 1,365	22.6 %
FY 2001	\$ 2,791	\$ 12,661	\$ 15,452	18.1 %
FY 2002	\$ 1,102	\$ 5,471	\$ 6,574	16.8 %
FY 2003 (through July)	\$ 573	\$ 1,850	\$ 2,423	23.7 %
<b>Total</b>	<b>\$ 4,775</b>	<b>\$ 21,039</b>	<b>\$ 25,814</b>	<b>18.5 %</b>

### **Forest Service Visitor Days**

Visitor days at Forest Service land were an indicator of the level of tourism drawn by National Forest lands. This indicator would be useful for determining how implementation of the HFQLG Act may be affecting tourism in the Lassen, Plumas, and Tahoe National Forests. Unfortunately, forest service visitor surveys have been infrequent in the Pilot Project Area. The most recent survey in the Pilot Project Area was conducted by Plumas and Lassen National Forests toward the implementation of the National Visitor Use Monitoring project, an effort to better understand the use of National Forest recreation opportunities nationally. This survey was conducted in 2001 and, unfortunately, the results are not comparable with previous visitor-use studies conducted before the implementation of the HFQLG Act. Therefore, at this time, this information provides no indicator regarding change in visitor use since before implementation of the Act.

### **Social Status of Children and Families**

The social fabric in America is based on quality family relationships. There is a direct correlation between school performance and functional families. Parents are available in functional families to assist and support their children in school activities. This indicator uses school performance to track potential changes in family function. There is also a correlation between functional families and family income. Poor families and families in poverty tend to have more children, yet less time to spend with individual children. Participation in free school meal programs is used as an indicator of poor families.

The Scholastic Assessment Test (SAT) is one of the main college entrance exams accepted by U.S. colleges and universities. It is an exam taken by high school students planning to attend a college or university in their last year of high school. The SAT is often used as a barometer to examine how communities are preparing their young people for higher education.

Between 1993 and 1999 there was a generally increasing trend in SAT scores in the Pilot Project area. During this time, the SAT scores increased by an average of 36 points. Between 1999 and 2003, there has been an overall decrease in the region's SAT scores of 9 points on average.



It is doubtful that a correlation can be made between timber industry performance and SAT scores, given that timber industry employment decreased in all communities except Portola (Table 1) and that SAT scores in some of these communities have increased since 1999.

Free lunch programs are state-funded efforts to provide healthy meals to children in low-income families who qualify for the program. Leading up to 1998, there had been a steady increase in the percent of enrolled public school students participating in a free lunch program to 37 percent. In 1998, the percent fell 10 percentage points and remained at around 26 percent until 2002. This drop could not be related to implementation of the HFQLG Act because significant implementation activity did not take place until 2000.

There is no clear correlation between the trend in children and family status in the Pilot Project Area and its communities. Children and family status has varied to a great extent at the community level through 2003. The effect of implementation of the HFQLG Act on this indicator is unclear and likely insignificant. Indeed, there is no clear trend yet regarding the status of children and families in the three communities in which a lumber mill has closed after 2000.

### **Economic Status of Individuals and Households**

This indicator will use unemployment and per capita income to measure the degree to which the economic status of individuals is improving in the Pilot Project Area. The implementation of the HFQLG act can be considered a local economic trend. Unemployment cannot be determined reliably at the community level, and therefore, is analyzed at the county level in this report.

Counties that primarily consist of communities in the Pilot Project Area experienced steady declines in unemployment until 2000, when unemployment remained steady until 2001, then grew again through 2003.

The primary Pilot Project Area counties experienced economic growth for a period that lasted one year longer than that of the general area in 2000. The economic slump that began in 2001 in California did not begin in this region until a year later, in 2002.

### **Conclusion**

Communities in the Pilot Project Area have not experienced growth in the forest products industry, with the possible exception of Portola (according to employment data from DOC) and Chester (according to data collected in the FPIR). This could be due to the fact that the Act yet to be implemented as envisioned in the QLG Community Stability Proposal. Concrete conclusions regarding the Act's impact on socioeconomic conditions in the project area communities will have to be determined at a later time when socioeconomic conditions in the year in which the greatest amount of implementation activity took place can be evaluated.

The Pilot Project Area is clearly seeing some benefit from the planning and implementation of the HFQLG Act to date. Between FY00 and FY03, over \$4.8 million in service contracts were awarded to local contractors in the Pilot Project Area. In FY03, local contractors have harvested \$441,796 worth of timber. However, local communities are captured 46 percent of the value of timber sales harvested in FY03 and less than 20 percent of the value of all service contracts awarded during implementation of the Act. Overall for the local forest product industry, the impact had been moderate, but not enough to keep the industry from declining locally. Some communities rely on up to 40 percent of their timber overall and up to 80 percent of their timber in any given year from the Pilot Project Area.

Changes in social indicators for the pilot project area have been mixed since the pilot project began in 1999. Unemployment is up, but so is real income in the area. School test scores are up slightly, but so is participation in free and reduced meal programs. Communities that have lost a lumber mill since the beginning of the pilot project have fared slightly worse. Two out of the three have increasing free lunch participation and two (not the same two) have decreasing test scores since 1999.

## Revenues and Expenses

Section (j)(1)(E) of the HFQLG Act requires:

*(E) A comparison of the revenues generated by, and the costs incurred in, the implementation of the resource management activities described in subsection (d) on the Federal lands included in the pilot project area with revenues and costs during each of the fiscal years 1992 through 1997 for timber management of such lands before their inclusion in the pilot project.*

Table 16A displays FY92 to FY97 revenues and expenses associated with timber management activities prior to the HFQLG Act. Table 16B displays FY99 to FY03 revenues and expenses associated with the HFQLG Act. The summary for FY03 expenditures is located in Table 3 above.

### **Tables 16A and B. FY92 to FY97 Revenues and Expenses Associated with Timber Management Activities (A), and FY99 to FY03 Revenues and Expenses Associated with HFQLG Activities (B).**

<b>A. Lassen, Plumas, and Sierraville District of the Tahoe National Forests</b>		
Resource Management Activities of Timber Harvest, Timber Stand Improvement, Site Preparation and Tree Planting		
Fiscal Year	Revenue (Thousands \$)	Expenditures (Thousands \$)
1992	67,187	25,856
1993	34,408	18,194
1994	44,501	17,376
1995	52,873	22,596
1996	24,590	20,490
1997	24,465	22,207

<b>B. HFQLG Pilot Project</b>		
Resource Management Activities of DFPZ Construction, Groups Selection and Individual Tree Selection		
Fiscal Year	Revenue (Thousands \$)	Expenditures (Thousands \$)
1999	0	1,943
2000	20	7,182
2001	140	28,267
2002	989	21,557
2003	960	20,000

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**Sawlog and Biomass Volume**

Table 17 displays the of activities that generated revenue between FY92 and FY97

**Table 17. FY92 to FY97 Acres Harvested and Volume Offered and Sold Associated with Timber Management Activities**

<b>TIMBER MANAGEMENT ACTIVITIES on the Lassen, Plumas, and Sierraville District of the Tahoe National Forests PRIOR to the HFQLG Act (FY92 to FY97) :</b>						
	<b>FY92</b>	<b>FY93</b>	<b>FY94</b>	<b>FY95</b>	<b>FY96</b>	<b>FY97</b>
Regeneration (Acres)	8,634	7,853	8,206	7,531	9,063	15,591
Site preparation (Acres)	6,176	5,264	4,667	2,363	3,321	3,321
Timber stand improvement (Acres)	10,045	10,600	8,740	13,866	15,062	22,646
Sawlog volume offered (CCF)	426,000	424,000	375,000	555,200	374,200	383,000
Sawlog volume sold & awarded (CCF)	329,400	535,200	332,600	316,400	242,600	353,400
Total area harvested (Acres)	55,689	70,885	57,922	47,317	38,917	32,223

*Note: The Act required a comparison of FY92 - FY97; therefore, no figures for FY98 are displayed.*

During FY03, Pilot Project timber sales generated \$960,041 in revenues. Revenues were realized from harvest activities on 16 timber sales, and 11 service contracts with nested timber sales that were active in FY03. Sawlog and Biomass volumes have been combined and the Timber Sale Accounting (TSA) system reflects that 61,810 CCF removed generated the \$960,041 in revenues for FY03. Table 18 displays the resource management activities (acres) and associated volume (CCF) from FY99 through FY03. Table 19 displays the cumulative FY99 to FY03 volume offered and volume removed (or harvested) associated with the HFQLG Pilot Project resource management activities.

**Table 18. FY99 to FY03 Acres Harvested and Volume Offered and Removed Associated with HFQLG Pilot Project Resource Management Activities**

<b>HFQLG Pilot Project resource management activities described in subsection (d) of the HFQLG Act, volume and acres: FY99 to FY03</b>						
	<b>FY99</b>	<b>FY00</b>	<b>FY01</b>	<b>FY02</b>	<b>FY03</b>	<b>Total FY99-FY03</b>
DFPZ Acres Accomplished	640	7,215	41,197	16,651	24,442	<b>90,145</b>
Group Selection Acres Accomplished	0	200	1,836	1,258	0	<b>3,294</b>
Individual Tree Selection Acres Accomplished	172	772	528	395	44	<b>1,911</b>
Riparian Restoration Acres Accomplished	0	81	945	838	537	<b>2,401</b>
Sawlog volume offered (CCF)	4,785	44,422	88,802	37,168	41,418	<b>216,595</b>
Biomass volume offered (CCF)	4,278	64,517	143,117	31,354	44,402	<b>287,668</b>
Sawlog and Biomass volume removed (CCF)	0	5,754	33,151	99,163	61,810	<b>199,878</b>

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**Fiscal Year 2004 Activities**

Section (j)(1)(F) of the HFQLG Act requires:

*(F) A proposed schedule for the resource management activities to be undertaken in the pilot project area during the 1-year period beginning on the date of submittal of the report.*

The proposed Program of Work for FY04 Table 19 is a summary of the Proposed FY04 HFQLG Program by Project Type:

**Table 19. Proposed FY04 Program of Work by Project Type.**

Project Type	Number of Projects	DFPZ Acres	GS Acres	ITS Acres	Sawlog Volume CCF	Biomass Volume CCF
Timber Sale	15	13,909	2,573	4,398	191,568	69,824
Service Contract with embedded timber sale	9	12,720	0	0	18,948	29,633
Service Contract	8	5,510	0	0	0	0
Force Account Crew	14	7,356	0	0	0	0
<b>TOTALS FOR FY04</b>	<b>46</b>	<b>39,495</b>	<b>2,573</b>	<b>4,398</b>	<b>210,516</b>	<b>99,457</b>

A detailed description of the FY04 program can be found in Appendix D. Map 2 in Appendix E shows the locations of the planned FY04 DFPZs and GS.

The FY04 program of work also includes: 1) Administering current contracts; 2) Implementation of projects planned in previous years; 3) Environmental analysis for proposed projects; 4) Implementation of FY04 riparian management projects; 5) Out-year data collection and planning; and 6) Development of a work plan and schedule for the Plan Amendment/Revision required by Section 401 (i) of the HFQLG Act. All work will be conducted at a level commensurate with the \$26.2 million FY04 projected available funding.

Nineteen riparian restoration projects are planned for accomplishment in FY04, with an expected 994 acres of restoration, 2 miles of roads eliminated, and 9 road crossings eliminated. These projects will include meadow restoration and enhancement, stream channel improvement, road relocation, road closure, and slope stabilization. Map 3 in Appendix E shows the locations of these riparian restoration projects.

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