Lucky Peak

Main Report Volume 1

CENPD-PL-ER- (CENPW-PL-PF/8 Apr 88)(1105) 1st End Mr. Mason/k/221-3829
SUBJECT: Lucky Peak Master Plan

DA, North Pacific Division, Corps of Engineers, P.O. Box 2870,
Portland, Oregon 97208-2870 27 JUL 1988

FOR: Commander, Walla Walla District

1. The Lucky Peak Master Plan is approved subject to correction of minor acreage discrepancies which were pointed out informally to Mr. Grden of your staff.

2. Following correction of the acreage discrepancies discussed above, it is requested that you furnish five copies of the final Master Plan to this office for in-house distribution and submittal to HQUSACE.

3. In an effort to continually improve our Division-wide master planning program and the quality of our product, we believe it is important to share completed Master Plans with other offices. Individuals involved with master planning in those offices often benefit from the experiences of others in dealing with unique master planning problems, techniques for displaying data, graphic and computer applications, and so forth. Accordingly, as has often been the practice with other Master Plans approved by this office in the past, it is requested that you also furnish, if available, two copies each to Alaska, Portland, and Seattle Districts. One copy should be furnished to the Planning element and one to the Operations element in those offices.

JAMES R. FRY
Colonel, Corps of Engineers
Acting Commander

Encls
wd 2 cys

CF:
CENPD-EN
CENPD-CO
CENPD-RE
CENPW-PL-PF, Grden

DEPARTMENT OF THE ARMY
WALLA WALLA DISTRICT, CORPS OF ENGINEERS
WALLA WALLA, WASHINGTON 99362-9265

REPLY TO
ATTENTION OF:

CENPW-PL-PF (1110-2-1150a) 8 April 1988

MEMORANDUM FOR: Commander, North Pacific Division

SUBJECT: Lucky Peak Master Plan

1. Reference CENPW-PL-PF memorandum dated 10 June 1987, subject: Draft Lucky Peak Master Plan, and CENPD-PL-ER 1st Endorsement dated 28 August 1987.

2. Enclosed for your approval are five copies of the Final Lucky Peak Master Plan. All of your comments contained in the referenced 1st Endorsement have been incorporated into the plan with the the exception of comment number 28 pertaining to Volume 1.

3. We feel that it is in the public's best interest not to subdivide Chimney Rock Management Unit (MU) into two MU units, one for recreation and one for wildlife. We show wildlife plantings for the MU but feel the area should remain under a Recreation Intensive classification. The area has a unique geologic feature and is used by recreationists and serves as a visual resource for Chimney Rock MU. The wildlife habitat development will attract a variety of wildlife species which increases the opportunity for wildlife viewing. Also, Idaho Department of Parks and Recreation has expressed concern that the amount of land classified for recreation is not high enough.

Encls

FOR JAMES B. ROYCE
Colonel, CE
Commanding

Lucky Peak Master Plan

Main Report–Volume 1

US Army Corps
of Engineers
Walla Walla District

27 July 1988
Design Memorandum No. 5

VALIDATION.

The major planning effort for the Master Plan (MP) was assigned to Planning Division; however, continuous coordination with Operations Division, Real Estate Division, and Engineering Division was necessary. This coordinated team effort has established the principal guidelines and objectives for resource use of Federal lands of the Lucky Peak Lake project.

L. V. Armacost
Chief, Planning Division

Marvin G. Brammer
Chief, Engineering Division

Paul F. Winborg
Chief, Operations Division

Richard Carlton
Chief, Real Estate Division

RECOMMENDATION.

It is recommended this MP for resource use be approved and implemented to guide the use, development, and management of Lucky Peak Lake project resources.

for James B. Royce
Colonel, Corps of Engineers
District Engineer

APPROVAL.

Approval received from North Pacific Division by letter dated 27 July 1988.

Walla Walla District

LUCKY PEAK MASTER PLAN

28 JULY 1988

ACKNOWLEDGEMENTS

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North Pacific Division, Planning Division

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Reprographics and Audiovisual Section: Chuck Schilling, Chief; Robert Aguilar; Dick Grudzinski; Tom Holt; Elias Perez; Dave Terentieff; and Doug Thiele.

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MAIN REPORT - VOLUME 1

TECHNICAL APPENDIX - VOLUME 2

ACRONYMS

COMPONENTS OF LUCKY PEAK MASTER PLAN (LPMP)

LP - Lucky Peak
LPMA - Lucky Peak Market Area
LPSP - Lucky Peak State Park (Sandy Point, Spring Shores, and Discovery Units)
MP - Master Plan
MR - Main Report - Volume 1 of Lucky Peak Master Plan
MU - Management Unit
OMP - Operational Management Plan
PRO - Project Resource Objectives
PSMA - Lucky Peak Primary and Secondary Market Area
RO - Resource Objective
TA - Technical Appendix - Volume 2 of Lucky Peak Master Plan
VAC - Visual Absorption Capacity

STATE AGENCIES

IDFG - Idaho Department of Fish and Game
IDPR - Idaho Department of Parks and Recreation
IDOL - Idaho Department of Lands
IDOT - Idaho Department of Transportation
IDWR - Idaho Department of Water Resources

FEDERAL AGENCIES

FERC - Federal Energy Regulatory Commission
USACE - United States Army Corps of Engineers (Department of Defense)
USBLM - United States Bureau of Land Management (Department of Interior)
USBR - United States Bureau of Reclamation (Department of Interior)
USDA - United States Department of Agriculture
USFS - United States Forest Service (Department of Agriculture)
USFWS - United States Fish and Wildlife Service (Department of Interior)
USNPS - United States National Park Service (Department of Interior)
USSCS - United States Soil Conservation Service (Department of Agriculture)

OTHER

BPBC - Boise Project Board of Control

LUCKY PEAK MASTER PLAN

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PHOTO CREDITS

	Agency/Photographer/Date
Cover	USACE
1-1	USACE/Tom Holt/Sep 85
1-2	USACE/Tom Holt/Sep 85
1-3	Mike Passmore
2-1	John McKern
2-2	USACE/Doug Thiele/24 Jul 84
2-3	USACE/Doug Thiele/24 Jul 84
2-4	USACE/Tom Holt/Sep 85
2-5	USACE/Tom Holt/Sep 85
3-1	USACE
3-2	USACE/Doug Thiele/5 Jun 85
3-3	USACE/23 Jul 78
3-4	USACE/Sep 85
3-5	USACE/24 Jul 84
3-6	Blaise Grden/Jun 86
3-7	IDFG/Rick Gilchrist/Apr 85
3-8	Mike Passmore
3-9	USACE/Blaise Grden/Aug 82
3-10	IDFG
3-11	Idaho Historical Society
3-12	USACE/Tom Holt/Sep 85

No.

PHOTO CREDITS (CONTINUED)

	Agency/Photographer/Date
3-13	USACE/Tom Holt/Sep 85
3-14	USACE/Tom Holt/Sep 85
3-15	USACE/Tom Holt/Sep 85
5-1	USACE/Doug Thiele/24 Jul 84
5-2	USACE/Tom Holt/Sep 85
5-3	USACE/Tom Holt/Sep 85
5-4	USACE/Doug Thiele/23 May 87
5-5	USACE/Doug Thiele/24 Jul 84
5-6	USACE/Blaise Grden/Aug 82
5-7	USACE/Doug Thiele/5 Jun 85
5-8	USACE/Doug Thiele/5 Jun 85
5-9	USACE
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5-12	USACE/Doug Thiele/24 Jul 84
5-13	USACE/Doug Thiele/24 Jul 84
5-14	USACE/Tom Holt/Sep 85
5-15	USACE/Doug Thiele/24 Jul 84
5-16	USACE/Doug Thiele/24 Jul 84
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5-17.1	USACE/Doug Thiele/23 May 87
5-18	USACE/Tom Holt/Sep 85
5-19	USACE/Tom Holt/Sep 85
5-20	USACE/Doug Thiele/5 Jun 85
5-21	USACE/Aerial Photo W84-5-69/29 Jul 84
5-22	USACE/Doug Thiele/24 Jul 84
5-23	USACE/Doug Thiele/24 Jul 84
5-24	USACE/Doug Thiele/5 Jun 84
5-25	USACE/Tom Holt/Sep 85
5-26	USACE/Doug Thiele/24 Jul 84
5-27	USACE/Doug Thiele/5 Jun 85
5-28	USACE/Tom Holt/Sep 85
5-29	USACE/Tom Holt/Sep 85
5-30	USACE/Doug Thiele/24 Jul 84
5-31	USACE/Doug Thiele/5 Jun 85
5-32	USACE/Tom Holt/Sep 85
5-33	USACE/Doug Thiele/24 Jul 84
5-34	USACE/85
7-1	USACE/Doug Thiele/5 Jun 85
7-2	USACE/Doug Thiele/24 Jul 84

1

INTRODUCTION

SECTION 1 - INTRODUCTION

SECTION 1 - INTRODUCTION

1.01 LUCKY PEAK PROJECT.

"Lucky Peak Lake" (official name) is located in the mountains of southwestern Idaho 10 miles southeast of Boise (see Plate 1-1). Lucky Peak Dam, completed in 1955, was constructed by the Corps of Engineers to control flooding on the Boise River. When "normal full pool" (at elevation 3055), the lake is 12 miles long and has 45 miles of shoreline and 3,019 acres of surface area. Surrounding the lake within the project boundary is 4,288 acres. The project contains two units of Lucky Peak State Park (LPSP), the most visited state park in Idaho. Also, the project lies within Idaho Department of Fish and Game's (IDFG) Boise River Wildlife Management Area, the major game range in the state.

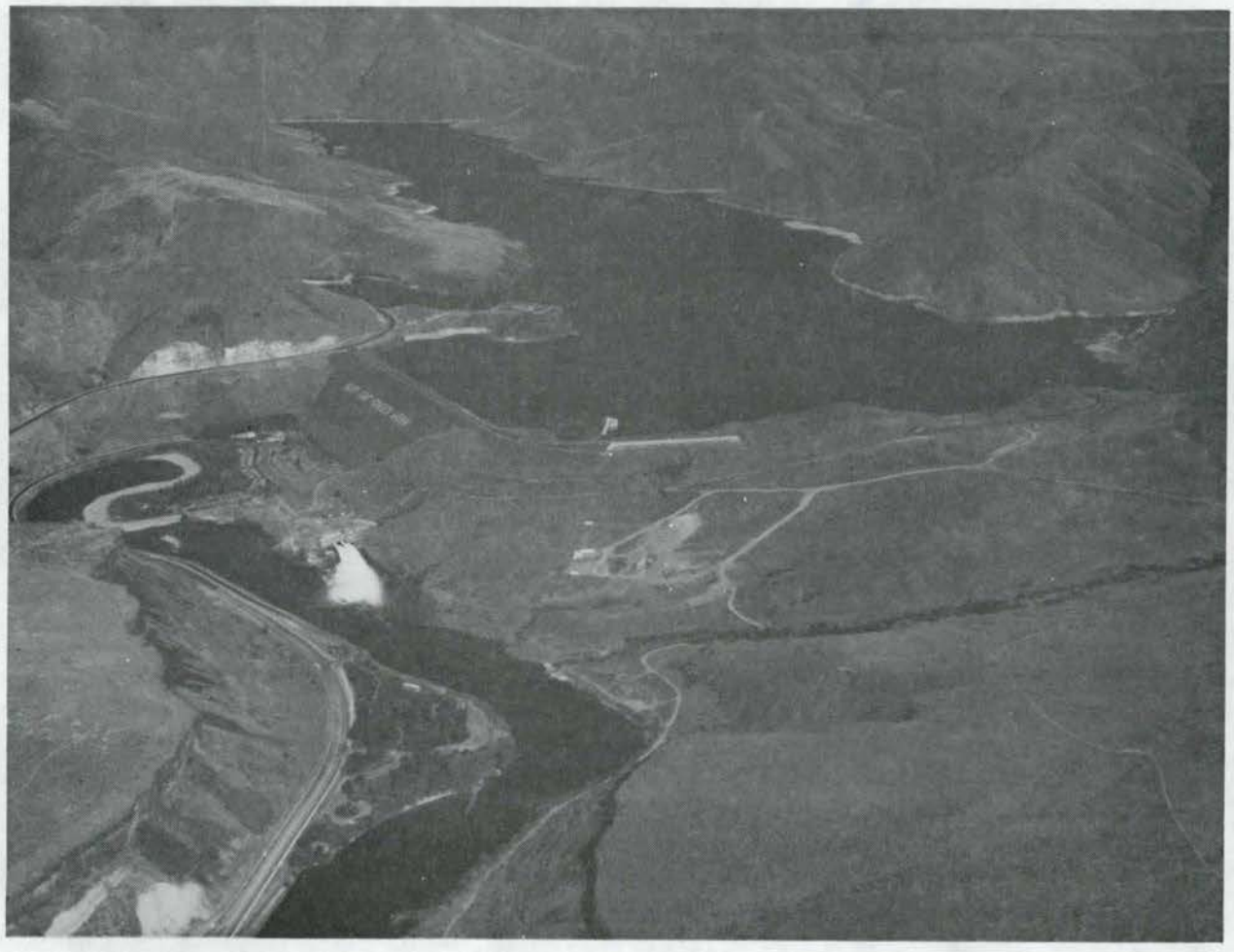


PHOTO 1-1. Lucky Peak Lake - This view is taken downstream of the dam above the Boise River. Lucky Peak Lake is located in a sagebrush steppe vegetation association within the Boise Mountains.

PHOTO 1-2. Boating on Lucky Peak Lake - Lucky Peak Lake provides primarily water-related recreation--water skiing, fishing, swimming, and various forms of boating.

PHOTO 1-3. Mule Deer - Lucky Peak lands are located in critical mule deer winter range. Mule deer are the most economically important big game species found at Lucky Peak.

Lucky Peak Lake

REGIONAL LOCATION

LU-05-47/1 1988 PLATE 1-1

1.02. PURPOSE.

a. This report replaces Lucky Peak Master Plan DM 5, dated December 1955, and DM 5C, dated April 1964, including DM 5C, C-1, Recreation Facilities, dated May 1965. Updating is necessary due to changed Corps policies and regional and project changes which have occurred since 1964. See the Technical Appendix (TA), Volume 2, Supporting Data, Item 1, for a complete list of design memoranda and reports pertinent to Lucky Peak project.

b. This plan is a guide for the use, development, and management of land and water resources at Lucky Peak project. All planning, management, and development actions should be consistent with the land use classifications and resource objectives (RO's) presented in this plan. The Master Plan (MP) will be revised as Corps policy and regional or project conditions change. Item 2 of Supporting Data (TA, Volume 2) contains public laws, Corps policy, and guidance which are pertinent to Lucky Peak project.

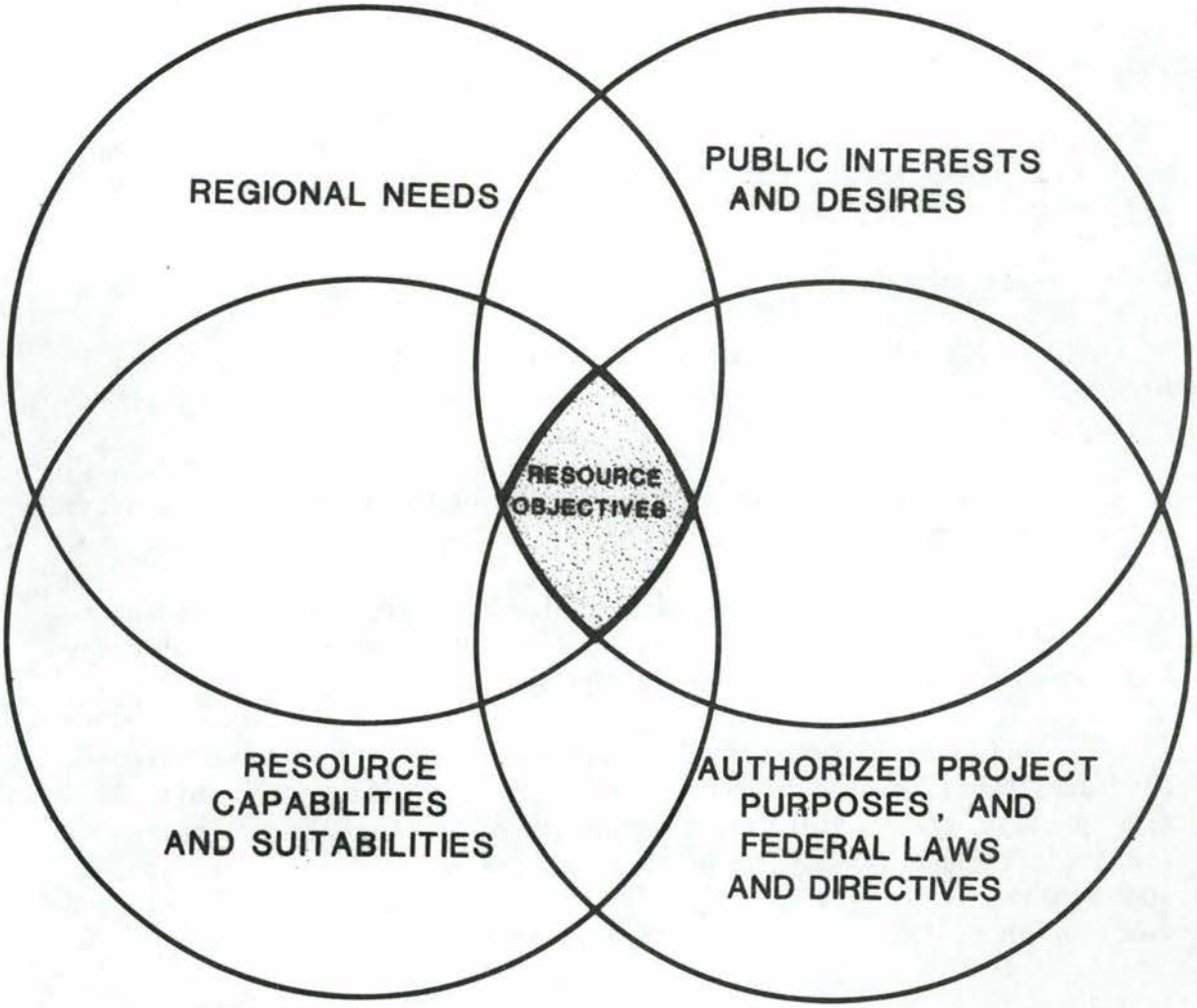
1.03. MASTER PLAN GOALS.

The goal of the MP as shown in Figure 1-1 is to find the best possible resource objectives from a combination of public (individuals, groups, Federal, state, and local agencies) interest and desires, regional needs, resource capabilities and suitabilities, authorized project purposes, and Federal laws and directives.

1.04. SCOPE.

a. The MP is a systematic organization of project goals and objectives, land use zoning, conceptual development plans, management priorities, and final recommendations. This was accomplished with an inventory and analysis of regional and project resources and application of Corps policy, public needs, and public desires. The plan has been coordinated with Federal, state, and local agencies and governments, and the public. This MP was prepared in accordance with the Final Environmental Impact Statement (EIS) Lucky Peak Dam and Lake, published in 1976, and the Final EIS Lucky Peak Modification related to hydropower development at Lucky Peak Dam published in 1979.

b. The Main Report (MR), Volume 1, contains project land uses and RO's. Volume 1 also contains specific RO's and conceptual development plans for each management unit. Design criteria, future study recommendations, a summary, and conclusions make up the remainder of Volume 1.



BASIC ELEMENTS OF RESOURCE OBJECTIVES

Lucky Peak Lake

MASTER PLAN GOAL

1988

FIGURE 1-1

c. The MP comprises two volumes. The TA, Volume 2, includes the regional and project inventory and analysis. It also contains the synthesis process and the method by which land use and RO's decisions were made.

d. Another document, the Operational Management Plan (OMP), will outline in detail how management goals and objectives of the MP will be achieved (see ER 1130-2-400 for details).

1.05. PLANNING PROCESS.

a. The planning process used for the MP update is shown in Figure 1-2. The process matches public desires and regional needs with project resources capabilities and potentials.

b. The following is a brief overview of the planning process as shown in Figure 1-2:

(1) Step one - Regional and project resources were inventoried and analyzed. This analysis defined the regional area of study and included ecological, cultural, and aesthetic factors.

(2) Step two - Preliminary land use and RO's were developed. Land use identifies the primary activity for each management unit; RO's are specific statements that clearly identify the selected option(s) for project lands. RO's serve to guide the use, design, development, and management of the project and its resources. For a detailed description of this step, see Volume 2, Section 4 - Synthesis.

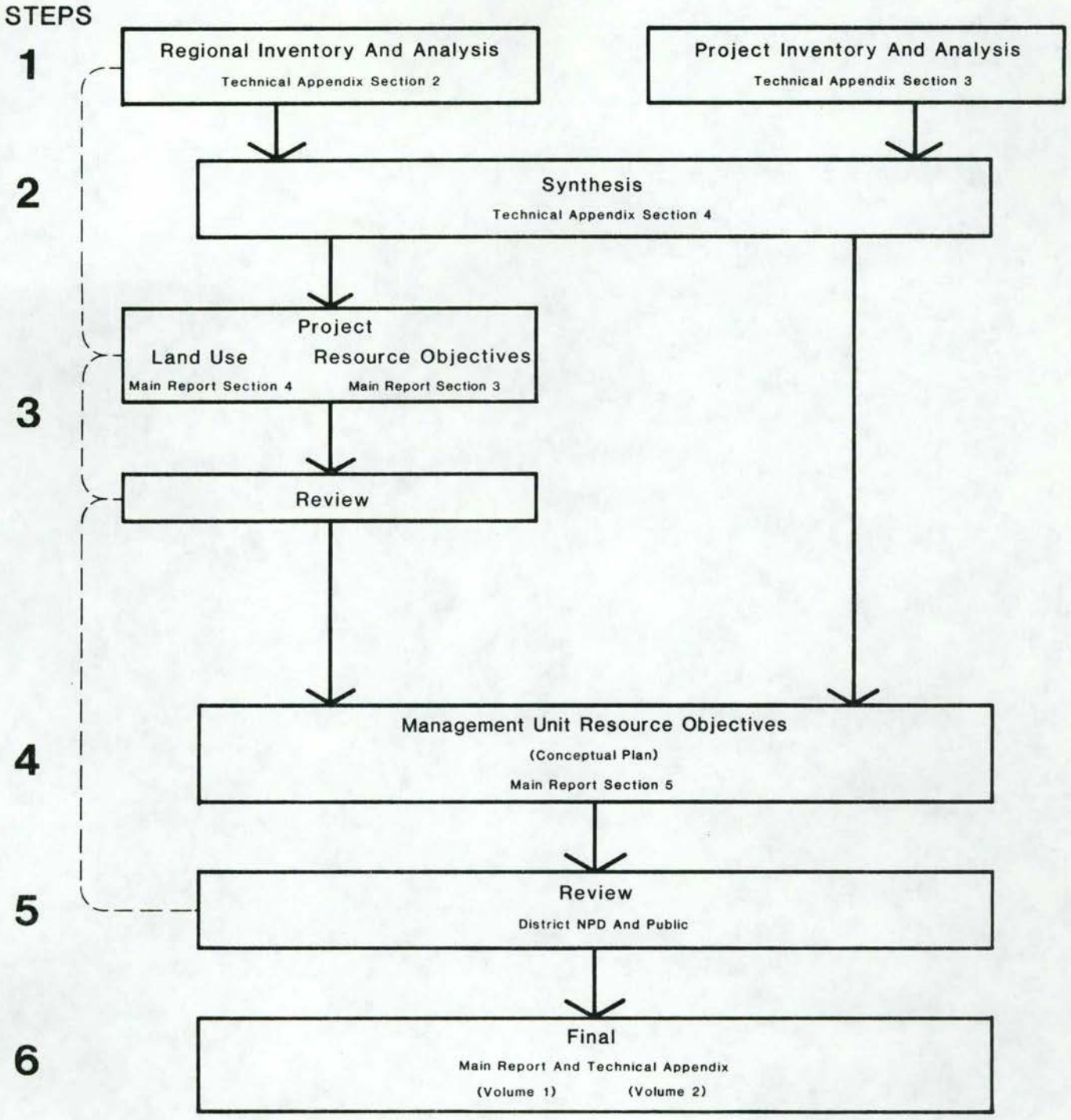
(3) Step three - Government agencies and the public reviewed preliminary land use and RO's. The public and agency comments were analyzed and incorporated in the draft land use plan and RO's. See Sections 3 and 4 of this volume.

(4) Step four - RO's and conceptual development plans were formulated for each management unit based on the synthesis of the regional and project factors and agency and public input.

(5) Step five - The final draft was sent out for review and comment. Comments were incorporated in the plan.

(6) Step six - Final report is sent to U.S. Army Corps of Engineers (USACE), North Pacific Division, Portland, Oregon, for approval.

(7) Step seven - Approval was granted by NPD on 27 July 1988. The MP will be updated or revised as necessary.



U.S. Army Engineer District
Corps of Engineers
Walla Walla, Washington

Lucky Peak Lake PLANNING PROCESS

1988 FIGURE 1-2

2

INFLUENCING AND CONSTRAINING FACTORS

SECTION 2 - INFLUENCING AND CONSTRAINING FACTORS

SECTION 2 - INFLUENCING AND CONSTRAINING FACTORS

2.01. GENERAL.

This section is a summary of the important environmental, cultural, and aesthetic influencing and constraining factors which determine the project RO's, land use plan, management unit RO's, and development plans. See Figure 2-1 for a list of factors and their importance in affecting the MP.

2.02. SUMMARY OF INVENTORIES AND ANALYSIS.

The following is a brief summary of the important regional and project ecological, cultural, and aesthetic factors (see TA, Volume 2, for definitions) which influence the MP. Regional factors are discussed first, followed by Lucky Peak project factors.

PHOTO 2-1. Bald Eagle - an endangered species in Idaho is found at Lucky Peak from November through April.

	EFFECT ON MANAGEMENT AND DEVELOPMENT OF LUCKY PEAK PROJECT
ECOLOGICAL	
Landform	●
Geology	○
Soils	●
Vegetation	◒
Wildlife and Fish	●
Hydrologic Basins	●
Climate	●
Air Quality	○
CULTURAL	
Archaeological/Historical	○
Access	●
LPMA	●
Regional Population	●
Regional Age	○
Regional Income	◒
Regional Economy	◒
Land Status	●
Regional Land Use	○
County Planning	◒
Land Ownership	○
Regional Outdoor Recreation	●
Project Development and Operation	●
Project Visitation	●
AESTHETIC	
Visual	●
Auditory	○
Olfactory	○

INFLUENCE/CONSTRAINT ON MANAGEMENT AND DEVELOPMENT:

● MAJOR

◒ MEDIUM

○ MINOR

Lucky Peak Lake

INFLUENCING AND CONSTRAINING FACTORS

FIGURE 2-1 **1988**

a. Regional Factors.

(1) Ecological Factors.

(a) Wildlife.

A major influence on development at Lucky Peak is the seasonal appearance of two wildlife species: mule deer and bald eagles. The mule deer herd in the Boise River area is the most significant herd in the state in terms of hunter activity and annual harvest. The bald eagle, an endangered species, is the second most influencing species. The recreation activities and development at Lucky Peak should minimize negative impacts on the habitat of these wildlife species.

(b) Climate.

Temperature and precipitation influence the project throughout the year. Heavy precipitation and runoff in the Boise Mountains require that the lake level be dropped for flood control during the winter and spring. During heavy runoff years, the lake will be held below recreation level (3,055 feet msl) until June or early July. High temperatures during the recreation season encourage high visitor use during the summer and, conversely, below normal temperatures and above normal precipitation discourage visitor use during the summer months.

(2) Cultural Factors.

(a) Access.

Lucky Peak is served by a major state highway (Idaho 21) which connects the city of Boise and the Sawtooth National Recreation Area, a major destination recreation area. Boise is 10 miles away and is a hub for major highways and airlines in southwestern Idaho, providing Lucky Peak with excellent access ability from the entire region for easy visitor access.

(b) Market Area.

The primary and secondary market area (PSMA) for Lucky Peak is composed of the four surrounding counties. The PSMA will determine the present and future demands on Lucky Peak. The majority of the visitors at Lucky Peak originate from the PSMA. The economy, population, and access of the PSMA affect current and future visitation and needs of the project.

(c) Population.

Due to Lucky Peak's close proximity to the largest population center in Idaho, the pressure on day-use recreation is high and will continue to increase in the future.

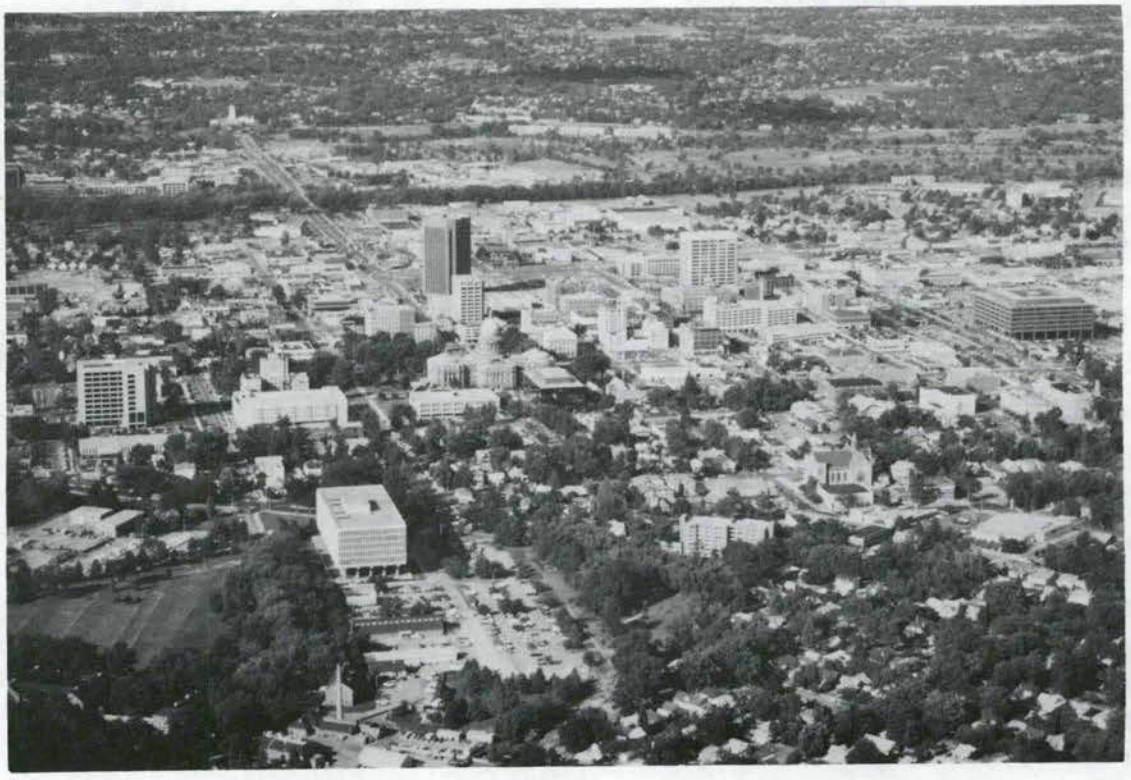


PHOTO 2-2. Boise, Idaho - The capital and largest city in Idaho is located within 10 miles of Lucky Peak.

(d) Income.

The city of Boise and Ada County have one of the highest per capita incomes and median family incomes in the state. This has a definite influence on the number and types of visitor use at Lucky Peak. Income will determine the ability to purchase recreation equipment and the amount of leisure time.

(e) Regional Economy.

The regional economy has a direct effect on visitor use at Lucky Peak Lake. The city of Boise, capital of Idaho, has a very stable economy. The major employment is in government, education, medical, service, and commerce. The stability of the Boise metropolitan economy will insure population and economic growth in the area and will continually cause pressure on Lucky Peak project resources.

(f) County Planning and Land Ownership.

Lucky Peak project is located at the junction of three counties. Development pressures on land adjacent to Lucky Peak will be minimal in Ada and Elmore Counties. This is due to the counties' zoning on private lands which protects the critical deer winter range around Lucky Peak. Additionally, over half of the lands in Ada and Elmore Counties around Lucky Peak are state or Federally owned and are managed for critical deer winter range. Most development pressure will be on lands in Boise County around Mores Creek Arm and Robie Creek because these lands are in private ownership and Boise County has no zoning, planning, or building ordinances. Thus, the lands along the arm of Mores Creek are most susceptible to encroachments from developments.

PHOTO 2-3. Road and Housing Development - adjacent to Mores Creek.

(g) Regional Outdoor Recreation.

Within 50 miles (commuting distance) of Boise, Idaho, Lucky Peak Lake has the highest attendance of the five major lakes. Lucky Peak's close proximity to Boise (10 miles), large surface area, deep water, mountain setting, and recreation facilities attract high visitation. In fact, Lucky Peak visitation is equal to

the nine major recreation areas within 100 miles of Boise. Because of the projected population growth in the Boise metropolitan area and Lucky Peak's close proximity and recreation opportunities, demand on day-use facilities will continue to increase.

(3) Aesthetic Factors.

Lucky Peak is an area which is very sensitive to negative aesthetic impacts. Two major factors account for a visually sensitive area. The first is that Lucky Peak is located in a transition zone between two major landform types: the northern Rocky Mountains and the Columbia-Snake Intermountain Plateau. This transition zone is an area where human senses are heightened. Second, this landform with steep slopes, thin soils, and low shrub-grassland vegetation has a low visual absorption capacity (VAC). This lack of ability to absorb the visual impacts of developments requires sensitive development criteria. These factors create a need for a visual management plan which includes methods of sensitive development and management recommendations.

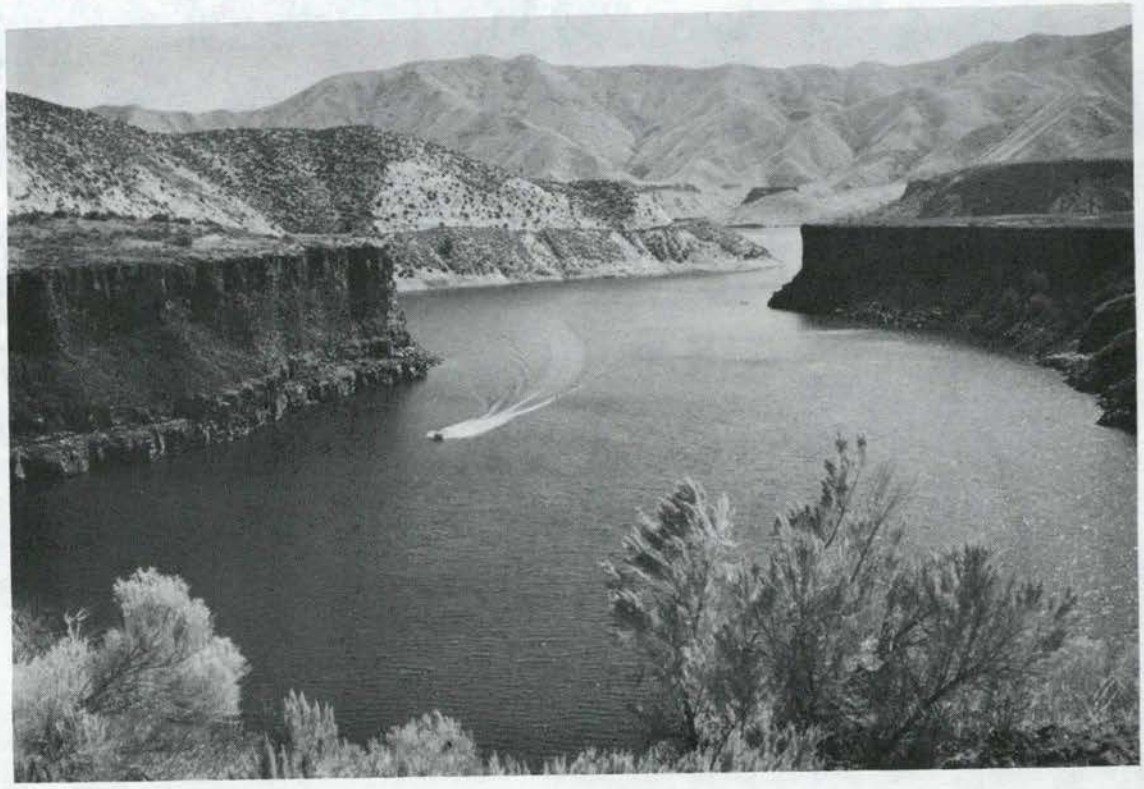


PHOTO 2-4. Scenic Quality - Lands at Lucky Peak project have a low capacity to absorb visual impacts due to the steep topography and the lack of vegetation cover which can provide a screen. However, the steep cliffs and existing undisturbed landscape provide high scenic quality.

b. Project Factors.

(1) Ecological Factors.

(a) Landform - Physiography.

Approximately 80 percent of Lucky Peak project lands are too steep for development and the majority of the remaining 20 percent, which is less steep, is located without potential lake access due to cliffs and steep slopes. Thus, steep slopes severely inhibit recreation and wildlife habitat developments.

PHOTO 2-5. View from Above Spring Shores Towards the Dam - Development is severely restricted due to the steep topography at Lucky Peak project.

(b) Soils.

Most soil types at Lucky Peak are not suitable for development which severely minimizes the development potential at the project.

(c) Wildlife.

The needs of all species of wildlife should be considered when planning development and management strategies at Lucky Peak. However, the needs of two species, mule deer and bald eagles, should receive the greatest consideration. Lucky Peak is located in the winter range for the most economically important mule deer herd in Idaho (see Section 3 of the TA - Volume 2). The IDFG manages 2,058 acres of licensed project land primarily as mule deer winter range. Lucky Peak also provides a wintering area for bald eagles, an endangered species in Idaho. In a letter dated 21 July 1987, the U.S. Fish and Wildlife Service (USFWS) stated that this MP will not affect threatened or endangered species according to the requirements of the Endangered Species Act of 1973 (see TA, Volume 2, Supporting Data, Section 5, page SD-12).

(2) Cultural Factors.

(a) Project Access.

Only a small portion of the shoreline is accessible by road, and additional road development would be environmentally damaging as well as costly. These factors severely affect potential future recreation development at Lucky Peak. The possible use of public transit in the future would help considerably in meeting the recreation goals of the project.

(b) Land Status.

Of the 4,288 acres above normal pool within Lucky Peak project, all the lands are under Corps management except 208 acres which are managed by the U.S. Bureau of Reclamation (USBR) and Idaho Department of Transportation (IDOT) (see Table 3-4 on page 3-42 of the TA, Volume 2). In addition, of the 208 acres, the Corps has flowage easements on 111.1 acres. IDFG has approximately 2,000 acres under license and Idaho Department of Parks and Recreation (IDPR) has 242 acres under lease with the Corps at Lucky Peak project. Because of the outgrants, the land use and management objectives of these two state agencies have been incorporated into this MP.

(c) Project Development and Operation.

1. Project Development.

Existing recreation developments were an important factor in developing attractiveness (lands best suited for a land use) models for future recreation sites (see Section 4 of the TA, Volume 2) because it is less costly to develop additional recreation facilities at existing sites.

2. Project Operations.

Lucky Peak was authorized as a flood control project. This requires the lake levels to drop during the flood season (15 October to 15 July). During normal runoff years the lake is held down for flood storage to 15 June. The level of Lucky Peak Lake is usually held at normal full pool (3,055 feet msl) during the recreation season (15 June to Labor Day). Storage space in Lucky Peak Lake is also used for irrigation and streamflow maintenance, and the top 5 feet (elevation 3055 to 3060) may be used for flood control surcharge. During the drought years, the level of the lake will drop below normal full pool during the recreation season to meet irrigation needs.

(d) Visitation.

Visitation origin is from the PSMA, primarily from the Boise metropolitan area. Visitation capacity has been reached at Lucky Peak since 1969; thus, development has not met visitor needs for over 17 years. Due to the ongoing growth of the Boise metropolitan area, this condition will continue. Refer to Volume 2 for data.

(e) Recreation Facilities.

Lucky Peak is a day-use, water-oriented facility with no overnight camping facilities. The demand for additional facilities (including camping) is increasing; however, day-use emphasis will serve the largest number of people. Refer to Volume 2 for data.

(3) Aesthetic Factors.

(See regional.)

2.03. OTHER AGENCIES INVOLVED.

Other Federal, state, and local agencies were invited to participate in the planning process and review a brochure, draft land use map, preliminary draft Volume 1, and draft Volumes 1 and 2 of the plan. Their comments were incorporated into this MP. The IDPR and IDFG have 2,300 acres of Lucky Peak project lands under lease and license. Their plans for these lands have been closely coordinated. The following agencies were contacted. Those agencies with plus (+) returned comments on preliminary draft Volume 1, and the agencies marked with an asterisk (*) returned comments on draft Volumes 1 and 2 (July 1987). Copies of transmittal letters to these agencies and their responses are enclosed in Supporting Data, page SD-12 in the back of TA, Volume 2.

Federal Agencies.

Bureau of Land Management
+*Bureau of Reclamation
+*Fish and Wildlife Service
+*Forest Service
 *National Park Service

Idaho State Agencies.

+*Department of Fish and Game
+*Department of Parks and Recreation
  Department of Transportation
  Department of Health and Welfare
  Department of Lands
  Department of Water Resources
  Division of Budget Policy Planning and Coordination -
    City and County
+*Historical Society

Ada County.

Planning Association
Zoning Department
Planning Commissioners
Parks and Recreation Department

Boise County.

County Commissioners

Elmore County.

Planning and Zoning

City of Boise.

+Park System
 Recreation Department
 Planning and Zoning
 Greenbelt Committee

2.04. PUBLIC INVOLVEMENT.

Initially a brochure was prepared and mailed out to the public. The brochure listed the general and specific RO's and proposed land use plans. Only a few minor comments were received. Prior to the printing

of preliminary draft Volume 1, a revised draft land use plan and land use classification definitions were sent out to the public and no comments were received. Preliminary draft TA, Volume 1, with the land use plan was sent out for public review during fall 1985; no comments from the public were received. The draft Volumes 1 and 2 were sent out to interested individuals and groups; again, no comments were received.

3

PROJECT RESOURCE OBJECTIVES

SECTION 3 - PROJECT RESOURCE OBJECTIVES

SECTION 3 - PROJECT RESOURCE OBJECTIVES

3.01. GENERAL.

a. RO's are clearly written statements that are specific to the project or a given project area which specify the selected option(s) for resource use, development, and management. They must be consistent with authorized project purposes, Federal laws and directives, regional needs, resource capabilities, and expressed public desires. Formulation and establishment of objectives for each civil works project is required by ER 1130-2-435 dated December 1987. This is part of the planning process which is outlined in Section 1.

b. Project and unit objectives serve to guide the design, development, use, and management of the project and its resources. Project RO's for the entire project are presented in this section. Objectives for each management unit are presented in Section 5 of this volume.

c. The following RO's reflect input from the public and Government agencies and are also based on an analysis of the resources at both the project and regional levels. The objectives are listed by number and grouped under the categories of Recreation, Wildlife and Fish, and Visual Resources. Figure 3-1 at the end of this section shows how each management unit has the ability to meet the project objectives.

3.02. PROJECT RESOURCE OBJECTIVES.

a. Recreation.

(1) RO Number 1 - Replacement/Upgrading of Existing Facilities.

Assure that all facilities meet Federal, state, and local design, health, and safety standards.

(a) Rationale.

Lucky Peak project was constructed over 30 years ago. Many of the facilities are between 20 and 30 years old and do not meet state and local health and safety requirements. The replacement of these deteriorated facilities is essential. The need for sound facilities is critical because of heavy visitor use and limited developability on the project. Spring Shores and Barclay Bay recreation developments have outgrown their current capacity. Their site layouts do not meet current safety regulations and guidelines. Major redesign of the site layout is necessary to alleviate safety problems and bring the layout to current standards. At Spring Shores, a county road traverses the management unit separating parking areas from the day-use area and marina (see Plate 5-16). Parking for Barclay Bay is along the through road to Turner Gulch, creating an extremely dangerous conflict with through traffic and parking (see Plate 5-5).

(b) Implementation.

The replacement of facilities will include:

- Mores Creek restroom
- Macks Creek restroom
- Turner Gulch restroom
- Barclay Bay/Turner Gulch restroom
- Barclay Bay water pumps
- Robie Creek water pump
- Robie Creek parking lot and ramp approach
- Viewpoint development
- Security lighting at all boat launching ramps

Replacement will be budgeted under the operations and maintenance budget. The following facilities to be replaced at Spring Shores are the responsibility of IDPR.

- Three restrooms
- Moorage docks
- Parking areas
- Concessionaire facilities

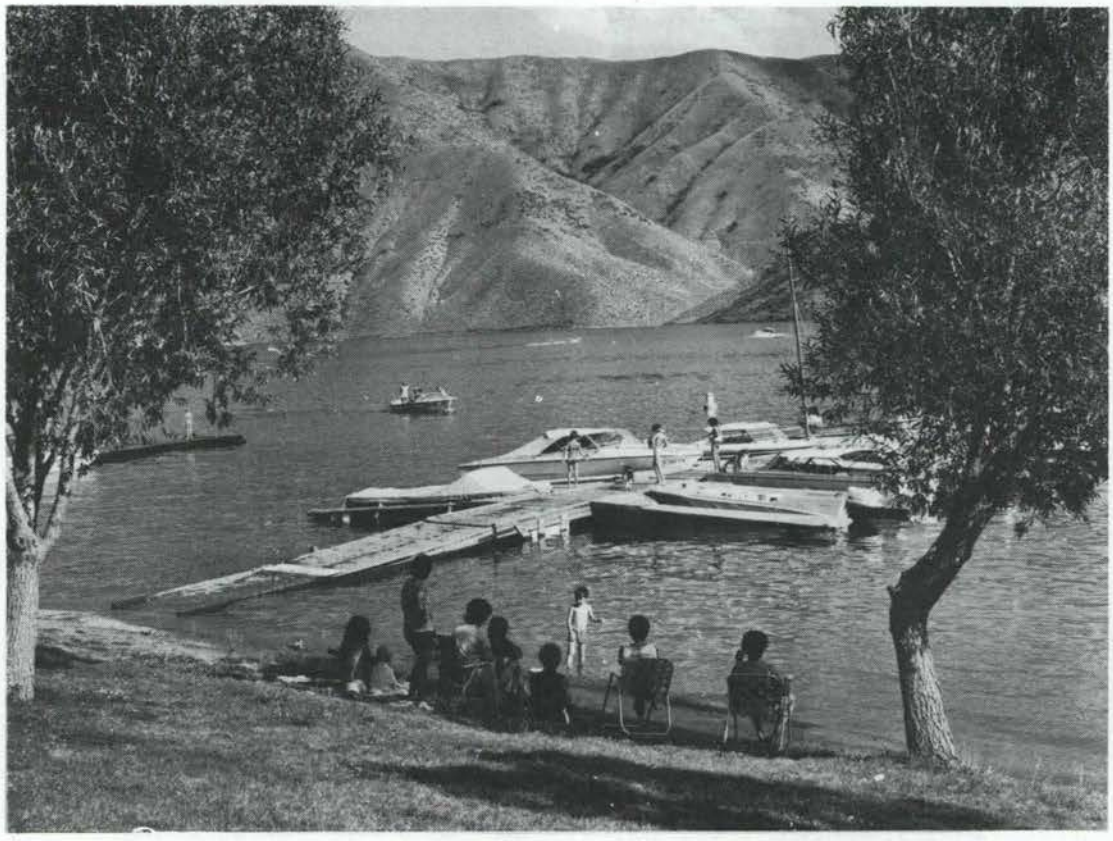


PHOTO 3-1. Substandard facilities scheduled to be replaced by IDPR.

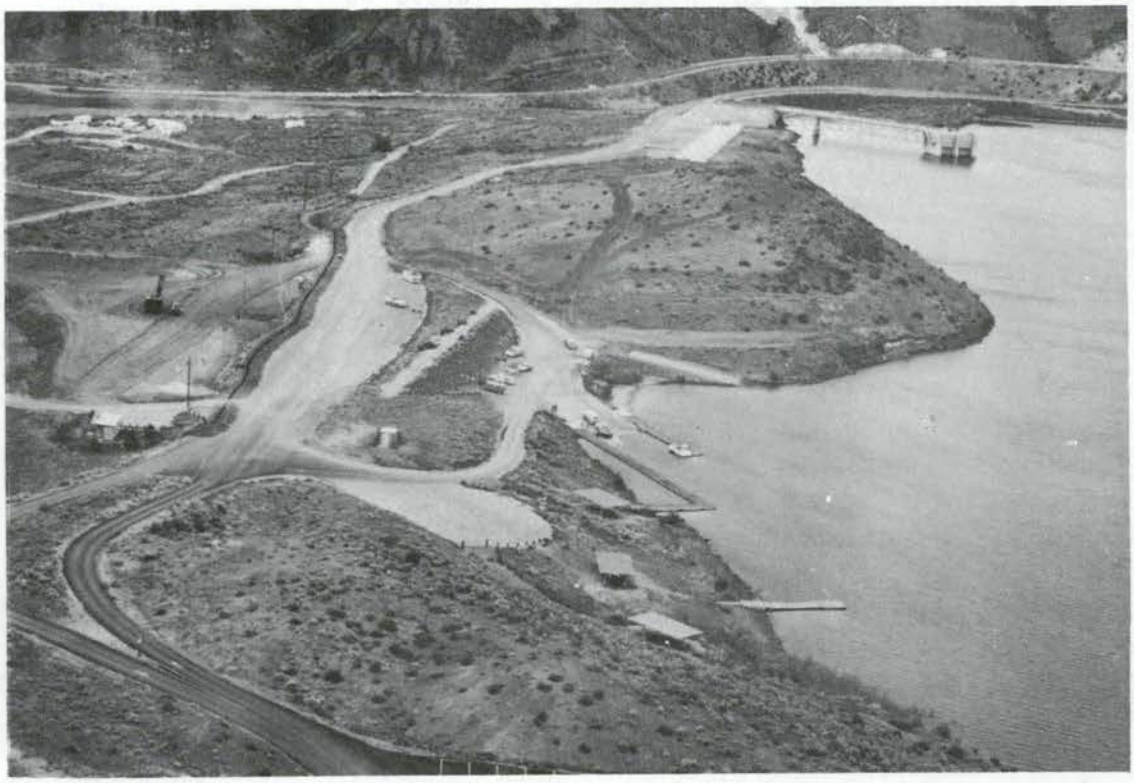


PHOTO 3-2. Barclay Bay - Parking facilities and launching ramp are to be expanded.

(2) RO Number 2 - Day Use.

Increase and enhance day-use facilities on the project.

(a) Rationale.

Day-use activities are the prime recreational use at Lucky Peak. The project serves visitors from a four-county area and is located only 10 miles from the city of Boise, Idaho. Boise and nearby communities have a combined population exceeding 275,000 people. As explained in the TA, Volume 2, recreation activities will increase until the year 2000 within Lucky Peak PSMA. Boating will increase 89 percent, water skiing 94 percent, fishing 56 percent, swimming 99 percent, picnicking 206 percent, hunting 52 percent, sightseeing 141 percent, and bicycling 96 percent. Lucky Peak Lake is one of the few major bodies of water available in the area for recreation and receives heavy use. The day-use activities with greatest participation are sightseeing, boating, fishing, picnicking, swimming, and water skiing. Boating facilities are the most overcrowded and will be given the highest priority in regard to recreational development.

(b) Implementation.

In order to meet the following needs, the expanded facilities will include, but will not be limited to:

EXISTING FACILITIES (11 lanes):

Auto parking	150 additional spaces
Auto and trailer parking	88 additional spaces

LAKE CAPACITY:[1]

Launching ramp	3 additional lanes[2]
Boat moorage	200 additional slips[3]
Auto parking	101 additional spaces[4]
Auto and trailer parking	69 additional spaces[4]
Restroom	1

See specific management RO's for location of expanded facilities.

These items will be programmed for funding in accordance with current regulations. Other avenues to accomplish the necessary improvements will be pursued such as involvement of private concessionaires of IDPR sites, Idaho National Guard, local associations, clubs, and organizations. These groups will be contacted and encouraged to participate in programs oriented toward assisting in the improvement of Lucky Peak lands. The accomplishment of many proposals encompassed in this objective will require cost sharing with a local sponsor. The IDPR is leasing two sites on the project at the present time and would be the logical sponsor. Implementation of objectives requiring cost sharing will be discussed with them and programmed for completion. Some development will be scheduled with the Boise Project Board of Control (BPBC) during construction of the powerhouse at Lucky Peak. Additional development may also be scheduled during construction of the Arrowrock powerhouse.

1/ Carry capacity. For an explanation on how this was determined, see TA, Volume 2, Supporting Data Section, page SD-1.

2/ Two lanes at Barclay Bay and one at Sheep Creek. However, if ramp is not built at Sheep Creek and parking could be resolved at Spring Shores, then the Sheep Creek ramp could be replaced by an additional 70 slips at Spring Shores. (Two lanes were constructed at Barclay Bay in 1988.)

3/ 410 slips would reach lake carrying capacity. Only 200 additional slips are possible due to inability to provide adequate parking.

4/ Based on 25 auto-trailer and 4 auto spaces per launching ramp lane.

(3) RO Number 3 - Coordination.

All development will be coordinated with appropriate Federal and state agencies through the MP process.

(a) Rationale.

Lucky Peak Lake project contains the most visited state park in Idaho and is located within important mule deer habitat. The project is also used by bald eagles, an endangered species in Idaho. Coordination will ensure that recreation demands can be met and that degradation of mule deer winter range and conflicts with endangered species management are minimized. Development will be planned for each individual site within resource capacities.

(b) Implementation.

The MP and OMP and their revisions will be coordinated with appropriate agencies.

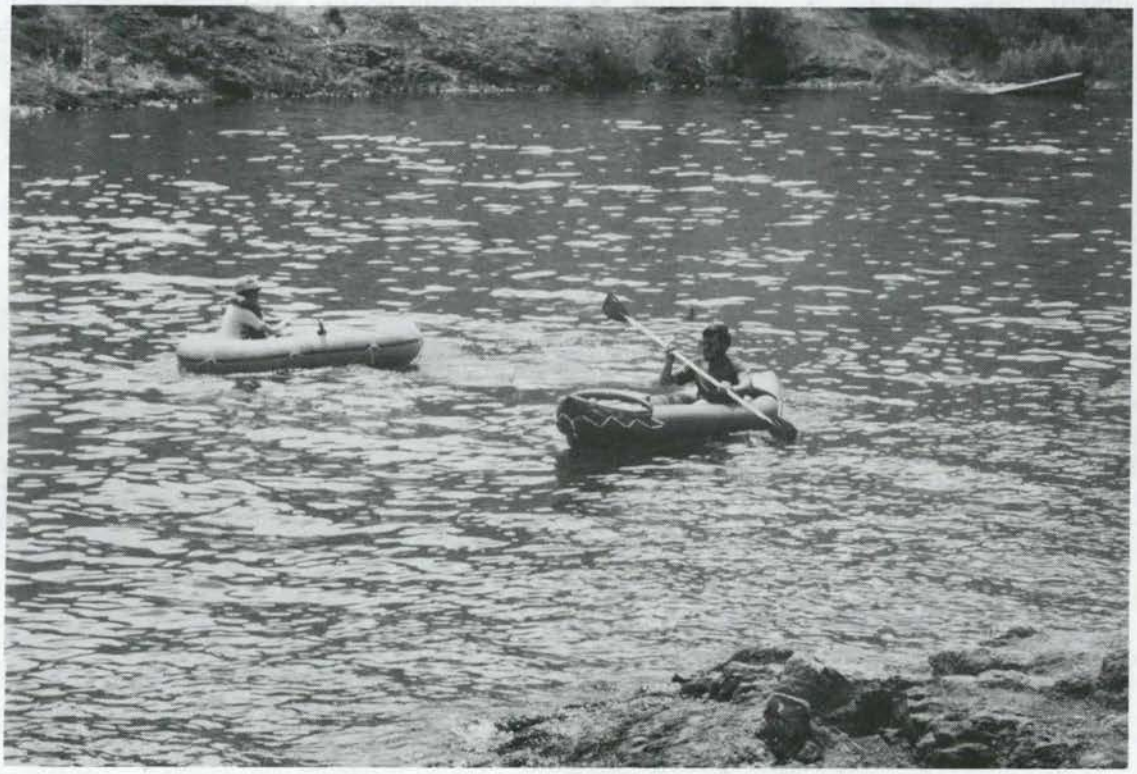


PHOTO 3-3. Rafting at Lucky Peak - The use of smaller watercraft is increasing.

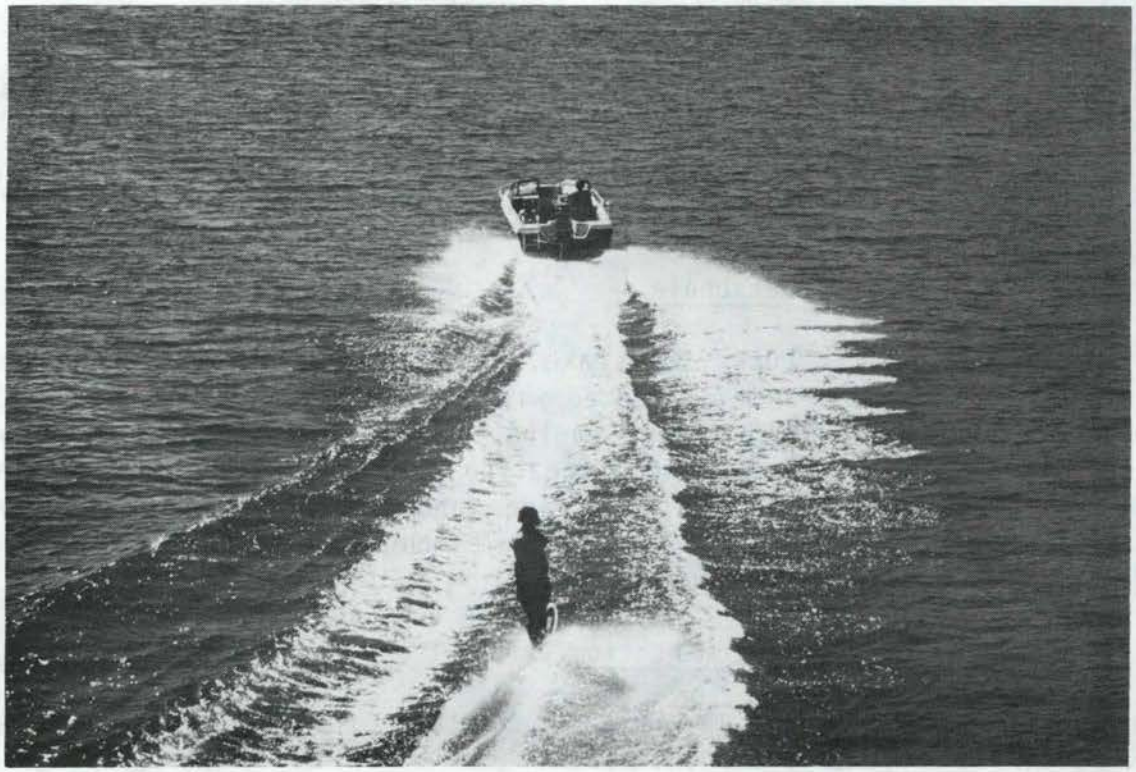


PHOTO 3-4. Water Skiing - The most popular water recreation activity. The potential for conflict of use is increasing as the different types of water oriented recreation increase.

(4) RO Number 4 - Boating.

Provide an aesthetic, safe boating environment and enhance boating activities on the lake.

(a) Rationale.

Because of the variety of boats using Lucky Peak Lake there is a potential for conflict between the different types of craft; i.e., boats with skiers versus sailboats or small craft. This situation will become more serious as the total number of users increases.

(b) Implementation.

Zoning based on facilities and recreation use patterns will aid in minimizing user conflicts and create a safer environment. Implementation of lake zoning will be determined on the basis of user conflict and carrying capacity analysis. The need for zoning will become more apparent in the future and will be valuable when ultimate facility development is complete and recreation participation and resource use are maximized. The zoning plan should be started in the future as the need arises and incorporated in this MP. Potential areas for zoning are Mores Creek arm and the upper end of the lake between Browns Gulch and Arrowrock Dam.

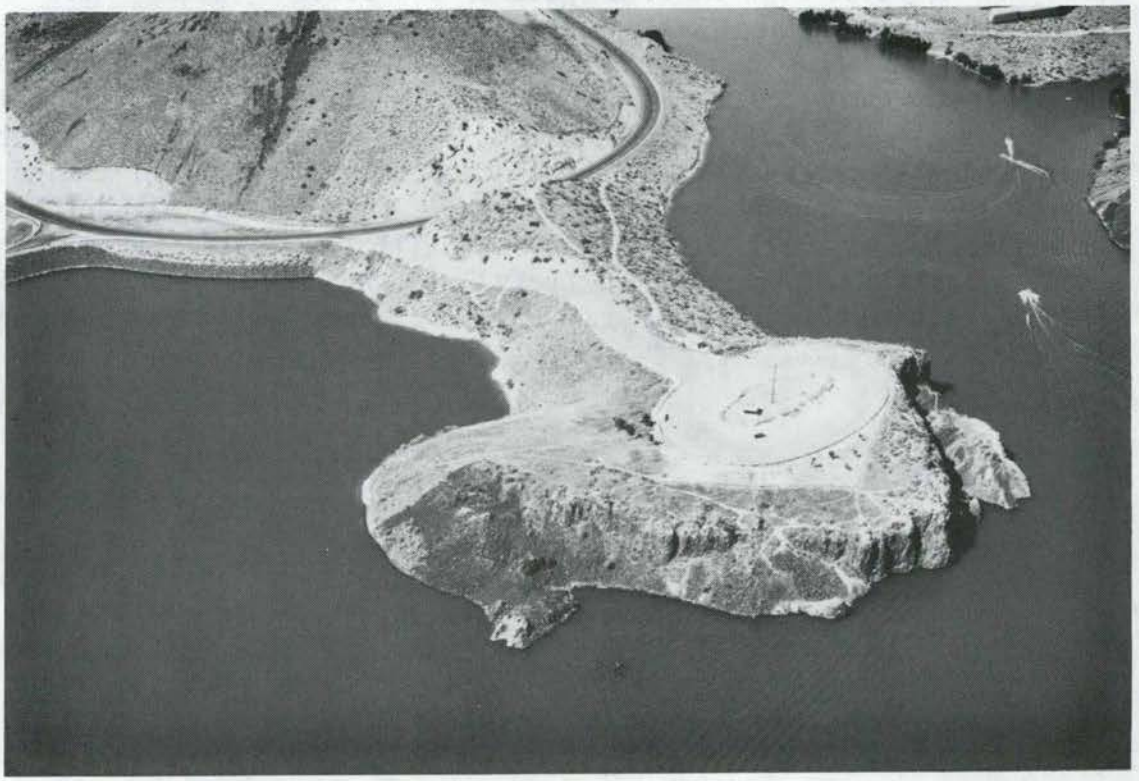


PHOTO 3-5. Lucky Peak Viewpoint - has excellent views and access and is the location of a proposed office interpretive area.

(5) RO Number 5 - Interpretive Facilities and Signs.

Provide additional identification, interpretive, and display facilities.

(a) Rationale.

Providing these facilities will allow visitors to identify Corps facilities and to become acquainted with the ecological, cultural, and aesthetic resources of the project and environs. Little effort has been directed towards interpretive facilities for visitors to the project. A viewpoint is located just off Highway 21 near the dam but currently offers no interpretive information. A recent survey indicates that approximately 80 percent of the visitors at Lucky Peak were not aware that the project was operated by the Corps (USACE 1983). Signs are needed for Corps identification and location of facilities.

(b) Implementation.

An interpretive plan will be developed within the Corps and coordinated with other Federal and state agencies which will include the development of interpretive features at Lucky Peak Viewpoint as well as the needs at other recreation sites such as Spring Shores. The new powerhouse and other new facilities should provide space for displays and additional features for visitor enjoyment. Space in the powerhouse visitor area should be allocated for the Corps of Engineers display regarding Lucky Peak. Interpretive features, as part of other recreation improvements at the project, will be constructed as funds become available. As part of the Lucky Peak Operational Management Plan (OMP), a sign study will be conducted to determine where signs are needed.

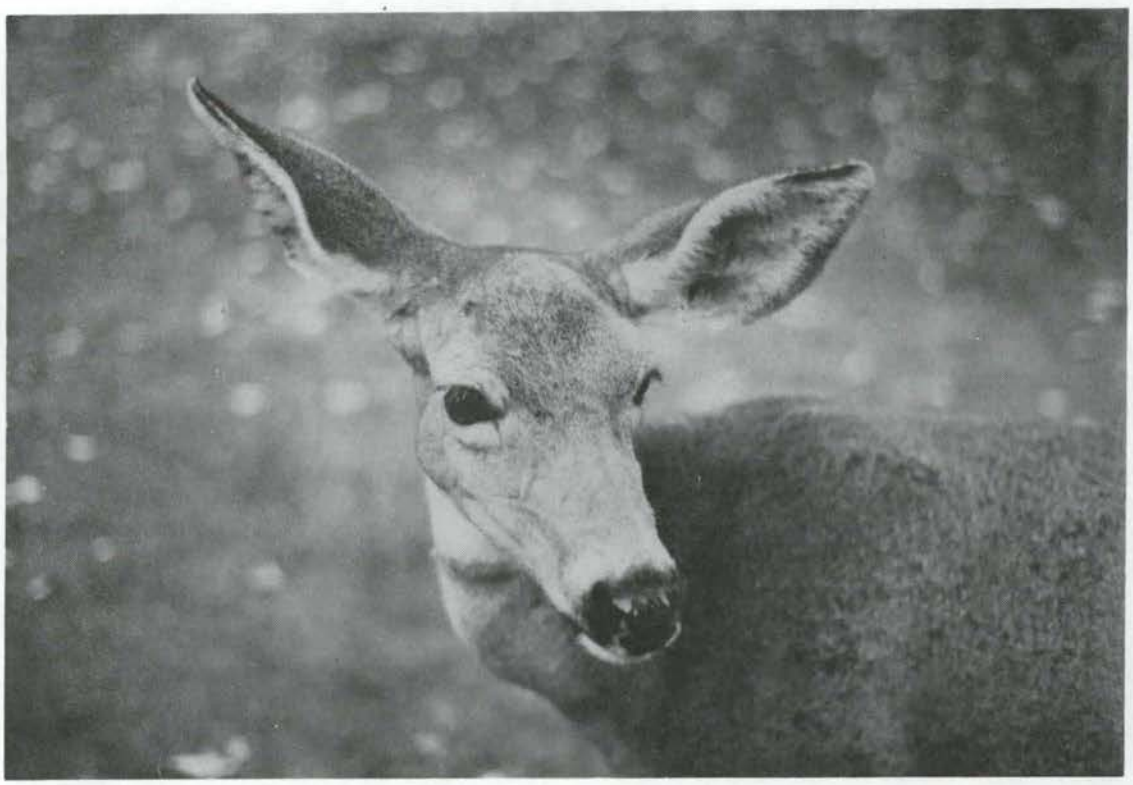


PHOTO 3-6. Mule Deer - Lucky Peak Lake is located within the most economically important mule deer herd in Idaho.

b. Wildlife and Fish.

(1) RO Number 6 - Mule Deer Habitat.

Preserve and maintain existing important mule deer winter habitat on Lucky Peak project lands.

(a) Rationale.

Lucky Peak project lies within an area of the Boise River Valley where as many as 10,000 mule deer from adjacent mountainous areas usually winter. These mule deer are part of the most economically important deer herd in Idaho, yielding an annual harvest of 3,000 to 4,000 deer. IDFG manages 32,000 acres in the area (including approximately 2,000 acres of Lucky Peak land licensed from the Corps) as mule deer winter range.

(b) Implementation.

All development will be planned, designed, and constructed so that it has minimal negative impact on winter deer use. Additional Corps lands will be added to the IDFG license for management as mule deer winter range. The updating of the license with IDFG will begin as soon as the MP is approved. Approximately 1,093.6 acres currently administered by the Corps will be added to the license with IDFG, and approximately 162.1 acres will be deleted from the current license. See Plate 5-22 for location. Protection of existing wildlife habitats will be ensured by the IDFG and/or the Corps. If improvements, such as fencing, are necessary for habitat enhancement, a cost-sharing agreement will be implemented with IDFG on licensed lands. Improvements on unlicensed lands will be undertaken by the Corps.

PHOTO 3-7. Bald Eagle.

(2) RO Number 7 - Endangered or Threatened Species.

Preserve, maintain, and improve habitat for endangered bald eagles and all other species at Lucky Peak Lake that may be classified as endangered or threatened in the future.

(a) Rationale.

Bald eagles winter near the dam and in the vicinity of the Mores Creek Arm. Counts for the entire project generally range from 5 to 10 individual sightings per day, although 19 were reported at the confluence of Mores Creek Arm and the Boise River Arm in one sighting. While no roosting sites have been observed on project lands, perching sites have been identified. Under the provisions of Section 7 of the Endangered Species Act of 1973 and the Fish and Wildlife Coordination Act of 1958, inventories of bald eagles and any other endangered or threatened species and their habitat and the preservation and management of their habitats must be coordinated with the USFWS.

(b) Implementation.

Identification of bald eagle habitat on project lands will begin soon and plans will be made for habitat preservation and improvement. Coordination with the USFWS regarding this matter will continue. Management will include the preservation of trees and snags for use by bald eagles and the installation of artificial perches. Should other endangered or threatened plants or animals be identified on the project, their habitats will also be identified and plans made for habitat preservation and improvement.

PHOTO 3-8. Chukar - are the most common upland game bird at Lucky Peak project.

(3) RO Number 8 - Wildlife Habitat.

Manage existing habitats for wildlife species other than mule deer and endangered species within Lucky Peak project lands.

(a) Rationale.

Wildlife management to date has centered around preserving and maintaining mule deer winter range. Little effort has been made to improve habitat for the variety of wildlife species other than mule deer that occur on project lands. Riparian plant communities inundated by the lake have not been replaced and wildlife populations dependent upon those communities have probably not returned to preproject levels.

(b) Implementation.

Conditions will be added to IDFG license for wildlife management on project lands to encourage development of habitat for additional wildlife species other than mule deer and endangered species. The Corps will also plan and develop wildlife habitat for additional species other than mule deer. Tree and shrub habitats will be developed and maintained to replace riparian growth that has been lost. Water will be provided through cisterns, guzzlers, and the development of springs to disperse and expand the range of wildlife species. Game-bird feeders will be installed to supplement food supplies for young upland game birds. Nest boxes will be installed to provide additional nest sites for cavity-nesting birds. Roosting sites and cover will be increased through development of brush piles and artificial roosts and the encouragement of natural brush in side draws and canyons uphill and away from the lake. When herbicides are needed, they will be carefully selected. Long-term selective protection of plantings by fencing, in conjunction with mule deer management techniques (rest-rotation grazing on licensed land) will be utilized to improve upland habitats.

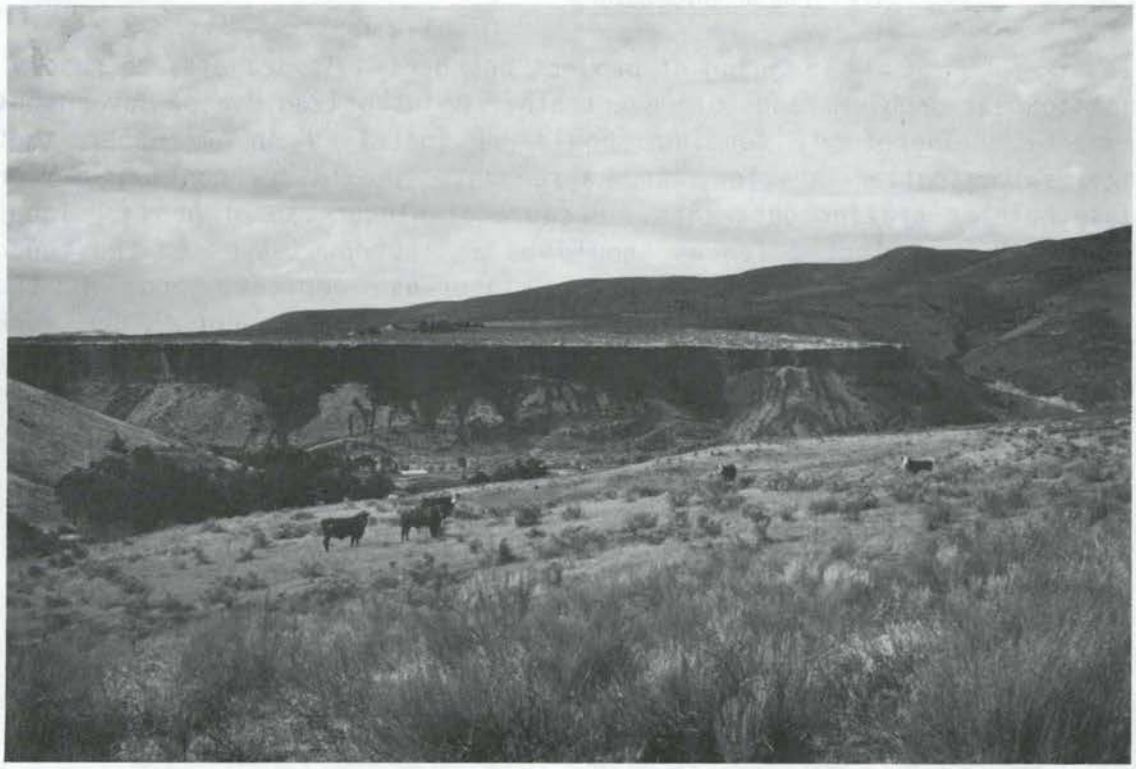


PHOTO 3-9. Encroachments.

(4) RO Number 9 - Encroachments.

Control livestock, agricultural, and vehicular encroachments on Lucky Peak project lands.

(a) Rationale.

Encroachments on project lands generally fall in two categories: construction of roads on project lands and unauthorized grazing. Construction encroachments can be solved by real estate actions but a method to prevent future occurrence needs to be implemented, particularly in areas where neighboring development is likely. Grazing encroachments (trespass by livestock) damage aesthetic, recreation, and wildlife values when cattle browse trees and shrubs planted for those purposes. Unauthorized grazing removes food intended for wildlife and excessive grazing can lead to erosion problems when perennial grasses are removed from the plant community. Also, noxious weed problems occur when perennial grasses are replaced by invader species.

(b) Implementation.

Fencing of project boundaries is proposed to resolve encroachment problems and to prevent other unauthorized use of Government property. Therefore, fencing should be installed in a manner that permits controlled grazing, and agreements should be continued with those holding grazing outgrants. Because of winter use of project lands by mule deer, selected fences should be a "let down" type so the fence can be placed on the ground during winter-use periods. Some of the proposed fencing on the project is already installed and future work will be completed through contracts and use of project personnel. Prioritization of fence locations will be established. Fencing will be completed as soon as possible. Monumentation will be completed prior to fencing of lands.

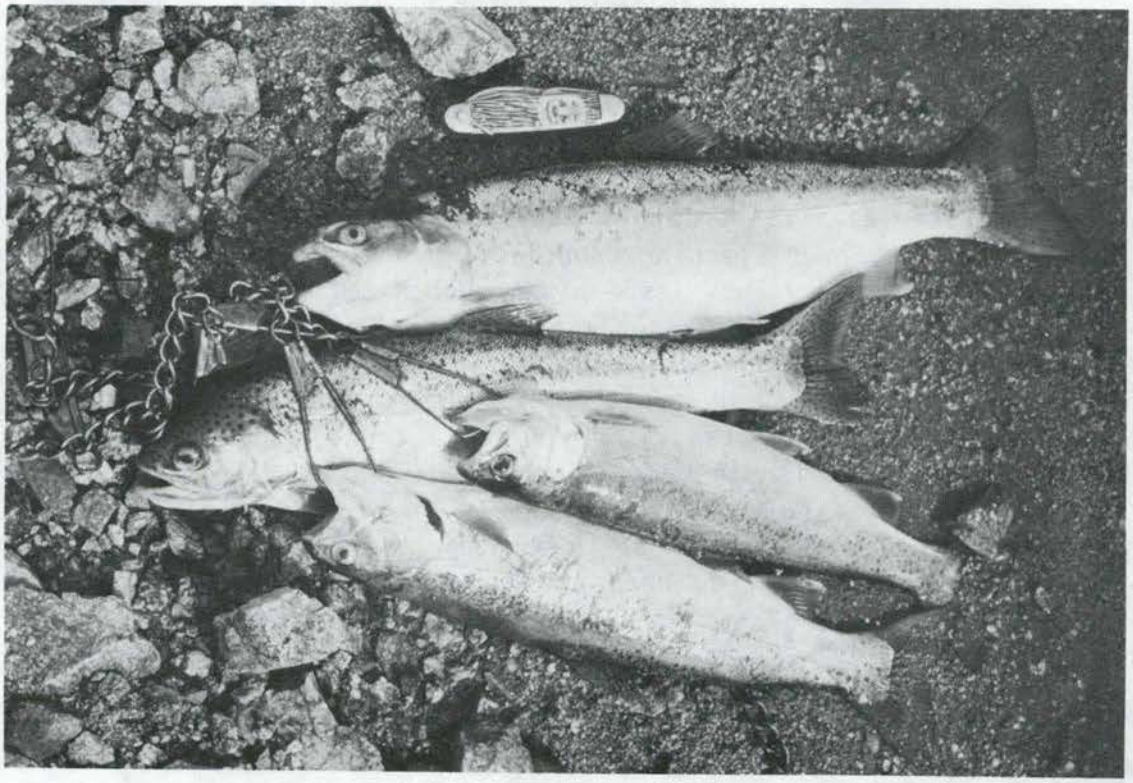


PHOTO 3-10. Rainbow Trout - Lucky Peak Lake supports a substantial stocked fish population.

(5) RO Number 10 - Fisheries.

Develop and maintain fisheries resources in Lucky Peak Lake and maintain flows for fisheries in the Boise River below the dam.

(a) Rationale.

1. Reservoir and lake fisheries in Idaho are managed by IDFG. IDFG is currently developing a combined fishery management plan for Lucky Peak Lake and Arrowrock reservoir, with an anticipated completion date of late 1988. The primary goal of IDFG in Lucky Peak Lake is the maintenance of a kokanee fishery. An existing catchable trout program is designed to supplement the kokanee. Approximately 100,000 catchables (at three to the pound, or 8 to 10 inches, totaling 33,000 pounds) are planted annually. The limiting factors to self-sustaining populations are lack of suitable spawning sites and severe lake fluctuation. Public demand for "yield" fishery requires the heavy stocking rates. (Scholten, 1986).

2. In addition to the trout fishery, IDFG plans to initiate a kokanee management plan. A kokanee fishery has been proposed for development in Lucky Peak as partial mitigation for losses of the anadromous fishery caused by hydroelectric power development on the Columbia and Snake Rivers. The improvement of resident fish habitat at Lucky Peak Lake would serve to mitigate losses of upriver spring chinook and summer steelhead fisheries by utilizing resident fish as described in the Northwest Power Planning Council's (NPPC) "Resident Fish Substitutions" issue paper. This issue paper recognizes the acceptability of mitigating anadromous fish losses with resident fish in blocked areas.

3. In addition to the kokanee and trout, Lucky Peak Lake supports a limited fishery of bull trout, mountain whitefish, smallmouth bass, and landlocked fall chinook.

4. In order to maintain a viable fishery downstream of the dam, a minimum flow needs to be provided during nonirrigation season.

(b) Implementation.

1. IDFG has submitted an amendment under NPPC's 1986 Draft Amendment Document to the Columbia River Basin Fish and Wildlife Program Section 804(e) to fund [through Bonneville Power Administration (BPA)] the propagation and release of 400,000 kokanee fry into Lucky Peak Lake annually beginning in 1987. BPA shall also fund the construction and operation of a kokanee spawning trap at Lucky Peak Lake (Mores Creek, tributary to Lucky Peak Lake) to allow the taking of approximately 500,000 eggs. This effort would provide a reliable source for IDFG's fish management program at Lucky Peak Lake for kokanee and is included in IDFG's Fishery Management Plan 1986-1990.

2. No official agreement exists between the Corps and IDFG for management; however, good land and water stewardship (as suggested in HQUSACE guidance) emphasizes coordination and cooperation between the Corps and the state management agency.

3. Water will be released downstream of Lucky Peak Dam during nonirrigation season to maintain fisheries as directed by Water Control Manual, Boise River Reservoirs, Boise, Idaho, 1985.

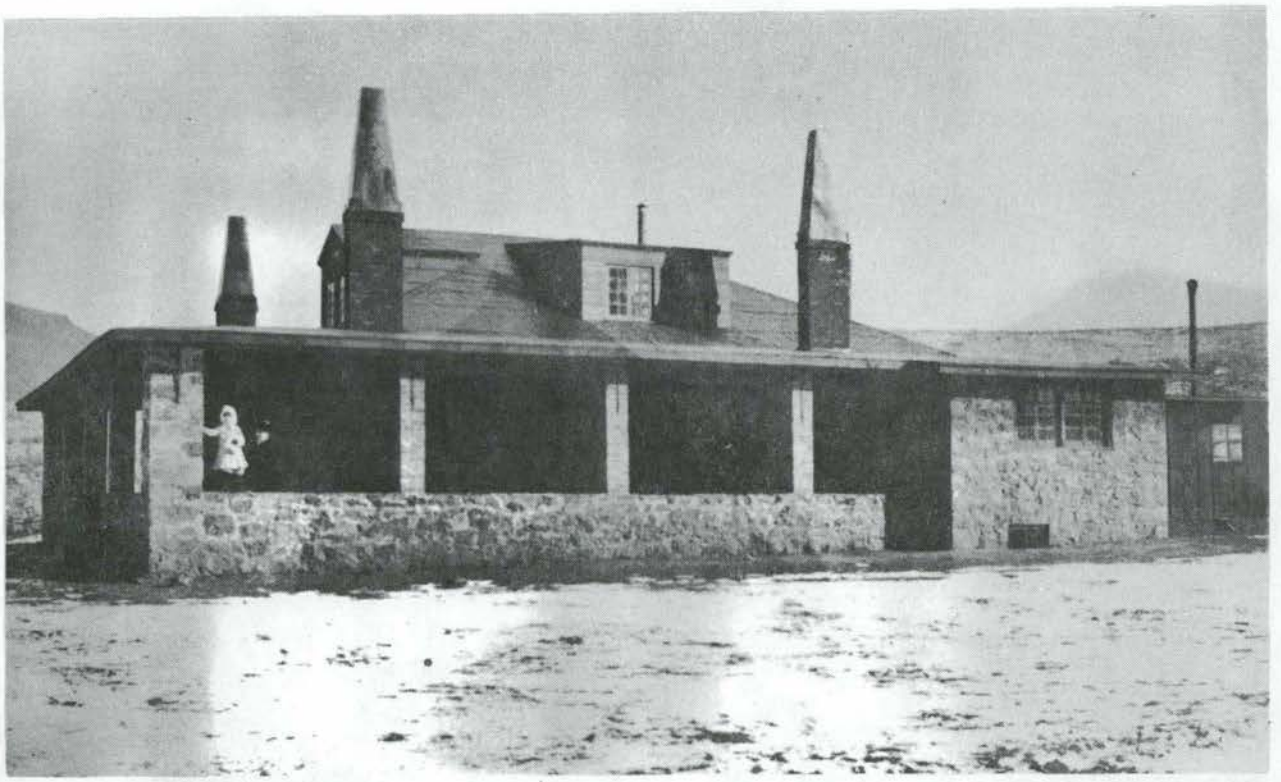


PHOTO 3-11. The Foote House - Though the house no longer stands, parts of the foundation are still plainly visible near the mouth of Lydle Gulch. Recent proposals are to rebuild the exterior of the structure with interpretive facilities on the interior.

c. Cultural.

(1) RO Number 11 - Cultural Resources.

Preserve, maintain, and enhance cultural resources on project lands.

(a) Rationale.

Cultural resources are limited and provide information when studied in an undisturbed condition. Cultural resources are protected under Federal and state statutes and regulations.

(b) Implementation.

Survey, identify, and monitor cultural sites. When needed, provide appropriate management measure. Provide interpretive facilities where appropriate as described under RO Number 5.

PHOTO 3-12. Visual Resources - This view looking down Mores Creek Arm just north of Robie Creek shows the high scenic quality of the landscape around Lucky Peak Lake and its environs.

d. Aesthetics.

(1) RO Number 12 - Visual Resources.

Preserve, restore, and enhance the visual resource of the viewshed (areas seen from Lucky Peak project).

(a) Rationale.

All Americans have the right to be assured of aesthetically pleasing surroundings. The Lucky Peak project presents many compelling reasons for management of visual resources. Its landscape, featuring long vistas, steep topography, and a large body of water, is of high visual quality. Lucky Peak's location in an ecotone (a transition zone between the northern Rocky Mountains and the western Snake River Plain) enhances its aesthetic value by heightening the visual awareness of the user. It is in a transition area, too, to man-made development; it is the first major undeveloped urban area outside the city of Boise along Highway 21. The number of people attracted to

the project is high--LPSP is the most visited state park in Idaho. Those who come principally to sightsee (approximately 50 percent of the total visitors) attest to its visual attributes. The number of visitors will increase due to the proximity of a large metropolitan area. The designation of Highway 21 as a State Scenic Highway and the high number of people using the highway from Boise also show the importance of maintaining good visual resources. The lack of tall vegetation and steepness of the landform give the Lucky Peak landscape a very low VAC which means any disruption to the landscape is very noticeable or prominent. In contrast, a timbered flat landscape would have a high VAC because, if planned properly, it would be able to absorb greater negative visual change without a noticeable impact on the visitor. Since the Lucky Peak landscape has a high scenic quality, high visitation, and low VAC, there is an increasing public sensitivity to the visual environment and negative impacts on it, and the area needs to be managed for visual resources. It is in the best interest of public and private concerns to provide a quality visual environment. These factors, plus the long vistas, are reasons to complete a Visual Resource Management Study.

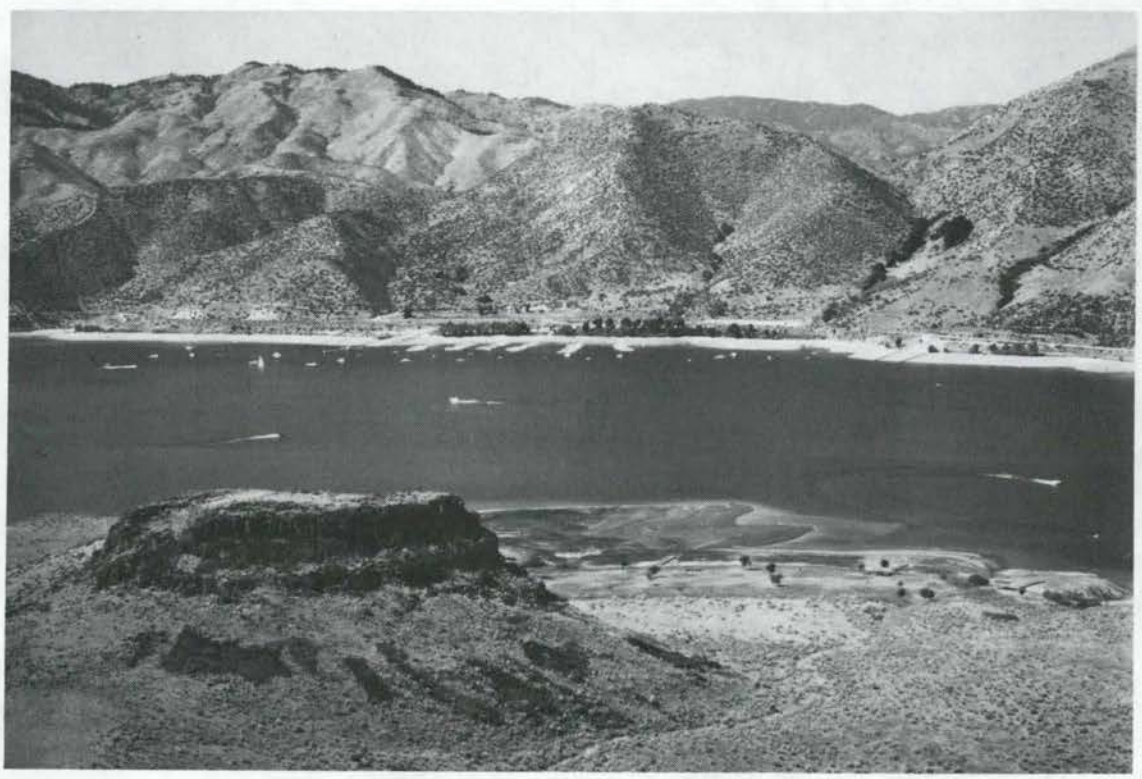


PHOTO 3-13. Low Visual Absorption Capacity - This view of Lucky Peak from Chimney Rock viewing across the lake towards Spring Shores shows the steep slopes and low vegetation on the project which allow development to be seen from the lake.

(b) Implementation.

Implementation will be accomplished by development of guidelines and a study and management plan for visual resources to be funded and completed by the Corps. Cooperation and coordination between the Corps and adjacent land managers and owners to minimize and eliminate negative visual impacts will be encouraged. Existing visual resources will be evaluated in the study to determine potential improvements or changes to lessen impacts. Many changes can be effected through operation and maintenance funding such as painting, plantings, and other upkeeping functions. Future developments for operation, recreation, and wildlife will be closely coordinated with the Corps' landscape architects, environmental specialists, and Operations personnel to ensure minimal negative visual impacts. Planning Division will have lead responsibility for the visual resource plan.

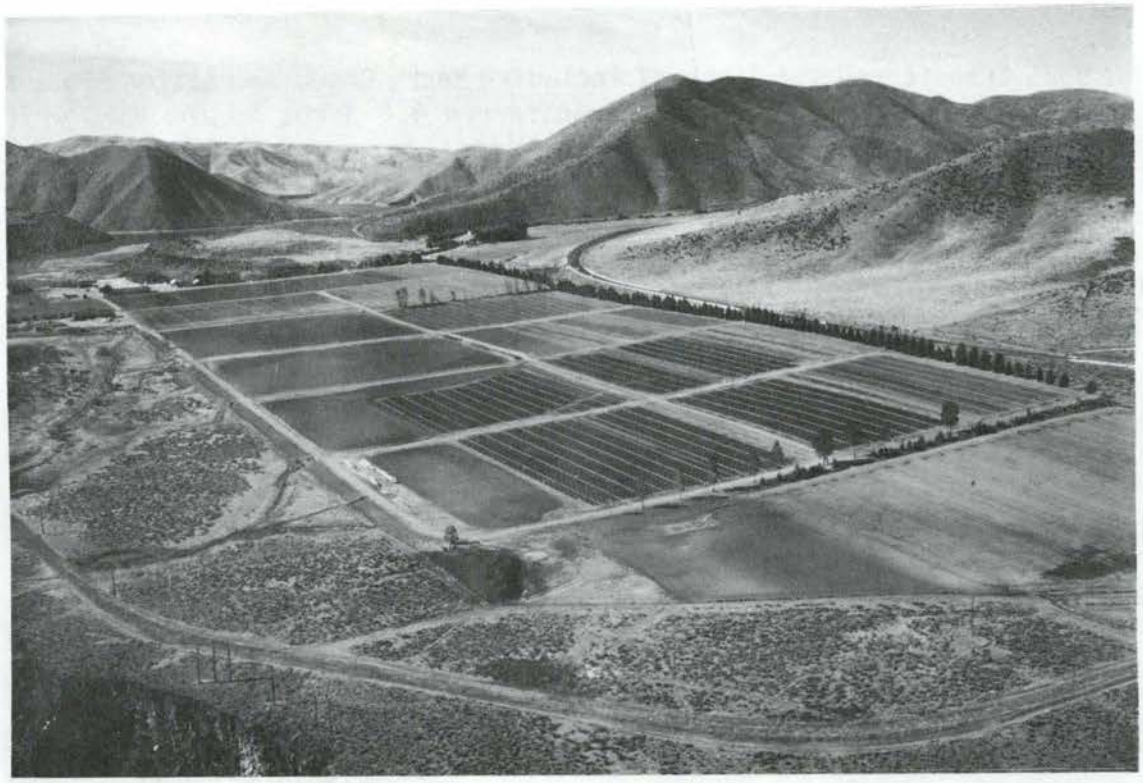


PHOTO 3-14. Lucky Peak Nursery - is operated by the USFS. The interchange transferred 10 acres of these lands to the USFS.

e. Land Interchange.

(1) RO Number 13 - USFS/USACE Land Interchange.

Eliminate dual agency administration on approximately 550 acres of Lucky Peak project lands. (This RO was completed 27 June 1988.)

(a) Rationale.

The Lucky Peak project boundary overlaps the statutory boundary of the Boise National Forest. Consequently, 557.1 acres of US public domain lands withdrawn for the National Forest were also later withdrawn for Lucky Peak project purposes. These lands would be more efficiently managed under one agency. The land interchange, as authorized by Public Law 804, 84th Congress, would eliminate the National Forest designation over these lands and give the Corps of Engineers responsibility and control over the lands within the project boundary. See Section 3, paragraph 3.03.c.(h), Land Interchange, of the TA, Volume 2, for further information.

(b) Implementation.

To meet this objective, a land interchange was accomplished. The interchange of lands is governed by Engineer Regulation (ER) 405-1-12, paragraph 11-98, Interchange of National Forest and Military and Civil Works Lands.

The USFS transferred 557.1 acres, including Macks Creek Recreation Area, to the Corps. The Corps, in turn, transferred 9.4 acres to the USFS which had been previously permitted to them (see paragraph 3.03.c.(h), Land Interchange, and Plate 3-10 in the TA). Required actions were accomplished by the Walla Walla District Real Estate Division. A Joint Order of Interchange was published in the Federal Register on 27 June 1988 implementing this RO.

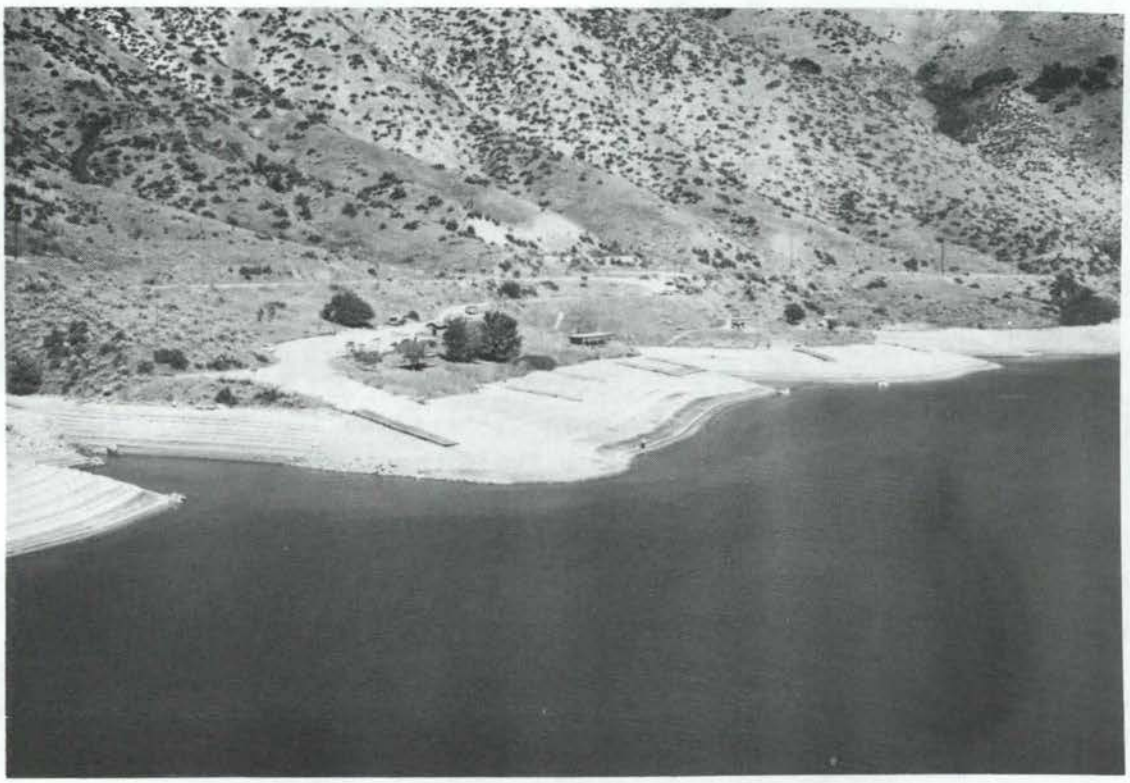


PHOTO 3-15. Macks Creek - Prior to the interchange, the Corps managed this facility under a Memorandum of Understanding with the USFS. This site and other USFS lands adjacent to the lake within Lucky Peak project were formally transferred to the Corps through the land interchange.

3.03. REFERENCES.

USACE (U.S. Army Corps of Engineers)
1983 Recreation Use Survey of Lucky Peak Lake. Walla Walla, Washington: Walla Walla District (unpublished).

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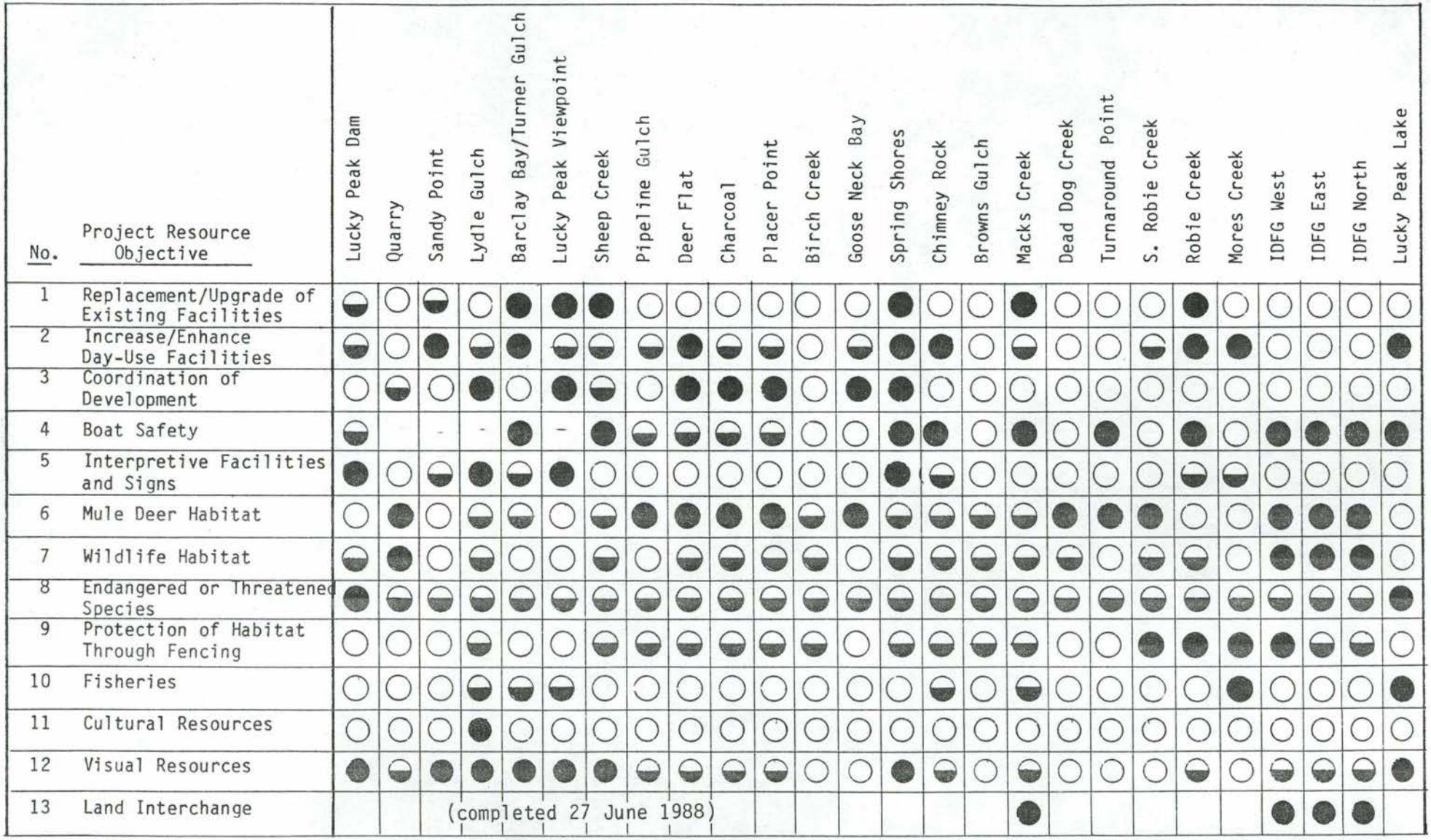
1980 Corps of Engineers ER 405-1-12, 27 October 1983 (Change 23).

Scholten, Gerald
1986 Personal Communication. Boise, Idaho: Idaho Department of Fish and Game.



Lucky Peak Lake

ABILITY TO MEET OBJECTIVE:

High Medium

Low Not Applicable

RESOURCE OBJECTIVES FOR EACH MANAGEMENT UNIT

1988

FIGURE 3-1

4
LAND USE

SECTION 4 - LAND USE

SECTION 4 - LAND USE

4.01. GENERAL.

a. Land use classifications defined below and shown on Plate 4-1 have been assigned to all Lucky Peak project lands. Project resource objectives are discussed in Section 3. For land allocations, the purpose for which the land was acquired, see TA, Volume 2, Item 8 of Section 6, Supporting Data.

b. Classifications shown on the Land Use Map conform to ER 1130-2-435, Preparation of Master Plans, December 1987. Full consideration has been given to the guidance in Engineer Manuals and supplemental instructions, and to all Federal laws governing development and management as cited in Item 2, Supporting Data, in the TA. Section 4 in the TA explains how land use assignments were determined.

c. ER 1130-2-435 took effect during the late stages of this Master Plan. Management unit maps are labeled using the older land use classification. To avoid reprinting the plates, the following should be noted: Recreation - Intensive Use is now Recreation; Wildlife Management and Recreation - Low Density are subclassifications of Multiple Resource Management.

d. Descriptive criteria and conditions pertaining to each category of land use are given in the following paragraphs.

4.02. LAND USE CLASSIFICATIONS.

a. Project Operations.

These are lands allocated to provide for the safe, efficient, and continuing operation of the project for flood control, irrigation, and power generation. At Lucky Peak, the dam, outlet works, second outlet works, BPBC powerhouse, project administration office, levee at Barclay Bay, and quarry near Lucky Peak nursery are in this category. Low-density recreation and wildlife habitat management activities are permitted when not in conflict with basic project requirements.

b. Recreation

Intensive (high-density) recreation use areas are defined as lands on which facilities have been or will be provided to accommodate the recreation needs of visitors in concentrated numbers, together with such adjacent or associated lands without facilities as may be required for open space purposes to make a whole compatible recreation unit. Facilities usually include, but are not limited to, access roads, utilities (water, electric, sewer), restrooms, picnicking, swimming, and boat launching and handling facilities. Uses which are not permitted on intensive-use recreation areas include such noncompatible manmade intrusions as pumping plants, underground or exposed pipelines or cables,

overhead transmission lines, nonproject roads, dredging, and filling operations. Exceptions may be made where necessary to serve a demonstrated public need in those instances where no reasonable alternative is available. Measures leading to habitat improvement for the benefit of wildlife may be performed on intensive-use recreation lands insofar as such habitat improvements are compatible with recreation uses.

c. Multiple Resource Management.

(1) Recreation - Low Density

These lands are designated for dispersed or low-impact recreation use. Development of facilities and automobile access to these lands are limited. The emphasis is on providing opportunities for, but is not limited to, picnicking, fishing, hunting, bird watching, ecological workshops and forums, hiking, bicycling, primitive camping, or similar low-density activities. Limited facilities such as benches, tables, sun shelters, vault toilets, and waste receptacles will be allowed. Utilities (electricity, water, and sewer) will usually not be provided for these facilities in low-density areas. All such facilities will be in harmony with the natural surroundings so as not to be intrusive to the environment. Landscape development or restoration, when necessary, will utilize plants native or naturalized to the area. Manmade intrusions such as pumping plants, pipelines, transmission lines, nonproject roads, dredging, and filling operations will be permitted with appropriate controls as necessary to minimize the adverse impact to wildlife and visual or other natural characteristics of the areas. These lands also provide open space between intensive recreation lands and incompatible land uses either on the project or adjacent to the project. No agricultural uses are permitted on these lands except when it would be favorable to wildlife and is compatible with low-density recreation. Measures leading to wildlife habitat improvement will be a management objective.

(2) Wildlife Management General.

Lands classified wildlife management are for the development and management of habitat for wildlife species. Most of these lands are administered under license to the IDFG. Licenses, permits, or easements will not be issued on wildlife lands for such manmade intrusions as pumping plants, underground or exposed pipelines or cables, overhead transmission lines, nonproject roads, or dredging or filling operations. Exceptions may be made where necessary to serve a demonstrated public need in those instances where no reasonable alternative is available. Such outgrants will include appropriate controls as required to preclude or minimize adverse impacts relative to wildlife and visual or other natural characteristics of the areas. Wildlife management lands will be available for low-density recreation activities such as hiking, picnicking, hunting, fishing, nature study, photography, bird watching, and other similar activities.

d. Easement Lands.

The Corps has the right to flood these lands if necessary for project purposes. These are located on USBR lands just below Arrowrock Dam and downstream of Lydle Gulch and also on IDOT lands between the dam and Sheep Creek and north of Mores Creek Bridge along Highway 21. See Section 3.03.c.(d) and Plate 3-8 in the TA for a detailed description of these easements.

e. License Lands.

The Corps acquired a license entitled "Agreement to Occupy and Use Land" from the State of Idaho on tract A-9-L. See Real Estate Map SD-8 in the Supporting Data of the TA. The tract of land occupies the Discovery Unit of LPSP. The Corps has the license "for the purpose of construction, repair, and maintenance" of the shoreline protection (riprap). The riprap protects the tract from projected shore erosion which could be caused by outlet waters from Lucky Peak Lake. The location is also shown on Plate 4-1. There was no acreage recorded for this license. (USACE, Tract A-9-L, 11 March 1956.)

f. Interchange Lands.

Approximately 557 acres of Boise National Forest lands within the project boundary were retained under the administrative jurisdiction of the USFS when the Lucky Peak lands were originally acquired. The 557 acres are from the old Boise River channel to the project boundary. Approximately 100 acres are below the normal pool elevation 3055. As discussed in Section 3 in the TA, these lands were transferred to the Corps. A Memorandum of Understanding between the USFS and the Corps gave the Corps administrative management and control over these lands until the final process was complete as required by Public Law 84-804. The lands previously outgranted to the USFS for the Lucky Peak nursery were transferred to the USFS through the land interchange.

4.03. LAND USE ACREAGE.

The 4,079.1 acres of land administered by the Corps of Engineers are listed below in Table 4-1 by land use classification. Table 4-2 lists land use acreage and management units. Also shown are flowage easements and interchange lands. The location of the areas is shown on Plate 4-1. The acreage listed is only for lands above normal full pool elevation of 3055 on Lucky Peak Lake and at elevation 2016 on the Boise River.

TABLE 4-1

LAND ACREAGE SUMMARY [1/]

LAND USE CLASSIFICATIONS		Acres	
Project Operations		140.7	
Recreation		389.1	
Multiple Resource Management		3,549.3	
Recreation - Low Density	684.9		
Wildlife Management General	2,864.4		
Lands Fully Administered by Corps of Engineers		4,079.1	
USACE Easement Lands (USBR and IDOT)		111.1	
TOTAL LUCKY PEAK PROJECT (LAND USE) ACREAGE			4,190.2
LANDS UNDER WATER			3,064.5
IDOT LANDS (USACE disposed of 136.10 acres but retain flowage easement rights on 38.83 acres, thus 97.3 with no USACE interest but falls within Lucky Peak Project.)			97.3
TOTAL LANDS ABOVE AND BELOW WATER WITHIN LUCKY PEAK PROJECT LINE			7,352.0

(See Volume 2, Table 3-4 and SD-8, part 1.)

1/ The acreage figures above are for lands above normal full pool elevation 3055 msl on Lucky Peak Lake and at elevation 2818 msl on the Boise River.

TABLE 4-2

LAND USE CLASSIFICATION ACREAGE
LUCKY PEAK PROJECT LANDS
December 1988

Land Use Category	Management Unit (Acres)		Total Acres
PROJECT OPERATIONS			140.7
Lucky Peak Dam	97.9		
Quarry	42.8		
RECREATION			389.1
Sandy Point Unit, LPSP	23.5		
Barclay Bay - Turner Gulch	76.0		
Viewpoint	11.1		
Sheep Creek	29.9		
Chimney Rock	77.6		
Spring Shores Unit, LPSP	68.3		
Robie Creek	26.9		
Macks Creek	72.6 1/		
MULTIPLE RESOURCE MANAGEMENT			3,549.3
RECREATION - LOW DENSITY		684.9	
Lydle Gulch	60.8		
Pipeline Gulch	55.2		
Deer Flat	77.9		
Charcoal	128.0		
Placer Point	29.8		
Birch Creek	18.9		
Goose Neck Bay	36.6		
Browns Gulch	56.6		
Dead Dog Creek	14.3		
Turnaround Point	12.1		
South Robie Creek	71.6		
Mores Creek	123.1		
WILDLIFE MANAGEMENT GENERAL		2,864.4	
IDFG, West	1,101.0 2/		
IDFG, East	1,222.5 3/		
IDFG, North	540.9 4/		

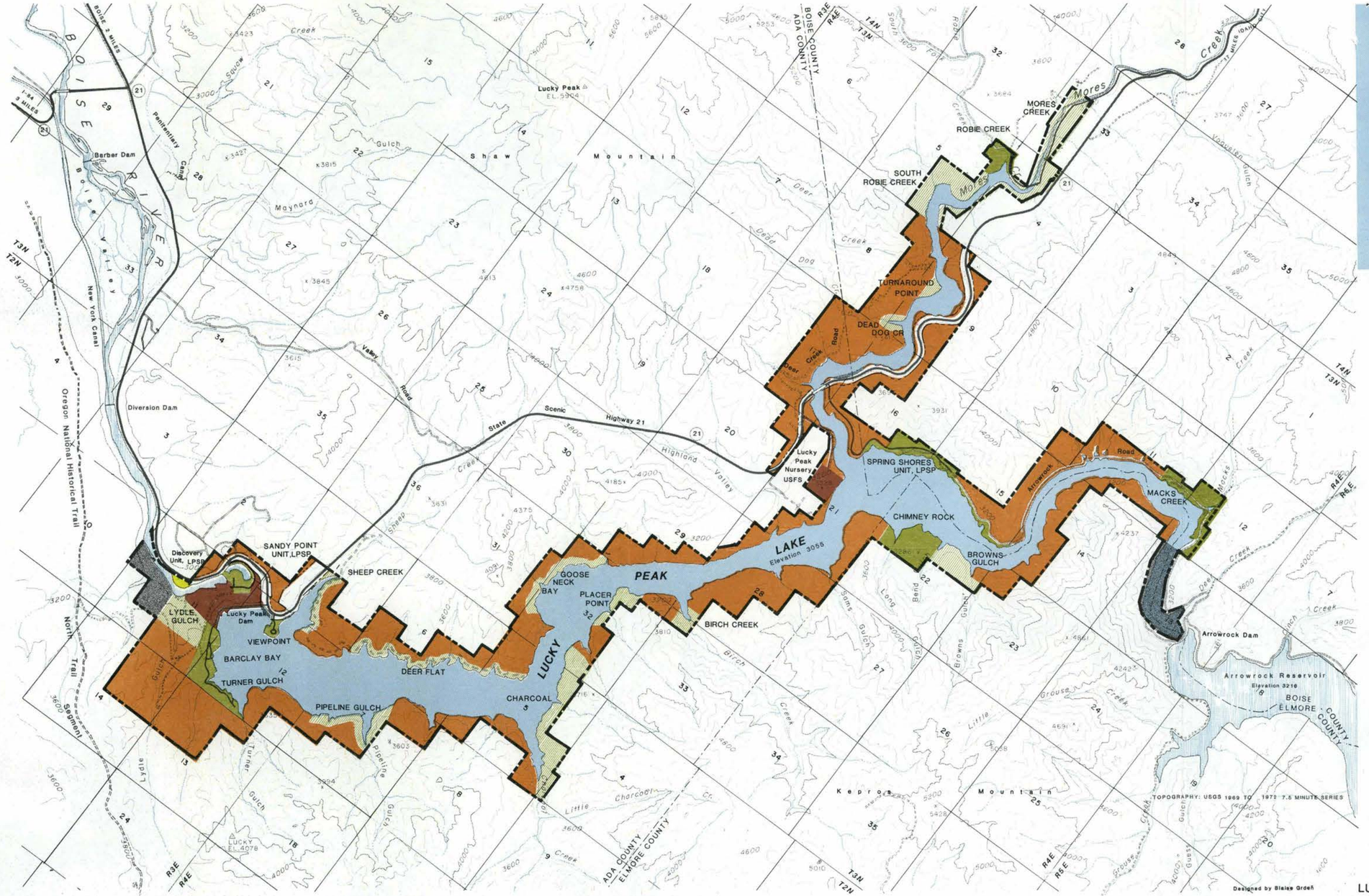
NOTE: 1/ through 5/ includes acreage transferred through USFS interchange completed on 27 June 1988.

1/ 69.4 acres
2/ 31.0 acres
3/ 105.0 acres
4/ 137.6 acres

TABLE 4-2 (Continued)

Land Use Category		Total Acres
LANDS FULLY ADMINISTERED BY CORPS OF ENGINEERS		4,079.1 5/
EASEMENT LANDS (above 3055 and 2818)		105.6
Boise River (USBR)	63.2	
Below Arrowrock Dam (USBR)	9.1	
State Highway 21 (IDOT)	33.3	
TOTAL LUCKY PEAK PROJECT LAND USE ACREAGE		4,184.7 5/6/

5/ These acreage figures reflects the Joint Order of Interchange, 28 June 1988, and are lands above normal full pool elevation 3055 on Lucky Peak Lake and at elevation 2818 on the Boise River.
See Volume 2, Section 3, pages 3-36 and 6/ below.
6/ See Table 4-1; and in Volume 2, see Table 3-4 and SD-8 for additional land ownership, acquisition, and disposals within the LP project boundary.



LUCKY PEAK LAKE 3055′ MSL

PROJECT BOUNDARY

PROJECT OPERATIONS

RECREATION

MULTIPLE RESOURCE MANAGEMENT

RECREATION - LOW DENSITY

WILDLIFE MANAGEMENT GENERAL

EASEMENT LANDS

LICENSE
FOR RIP RAP

4,000 3 2 1 0 FEET

1 1/2 0 1 MILES

ACRES 100

US ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WALLA WALLA, WASHINGTON

Lucky Peak Lake

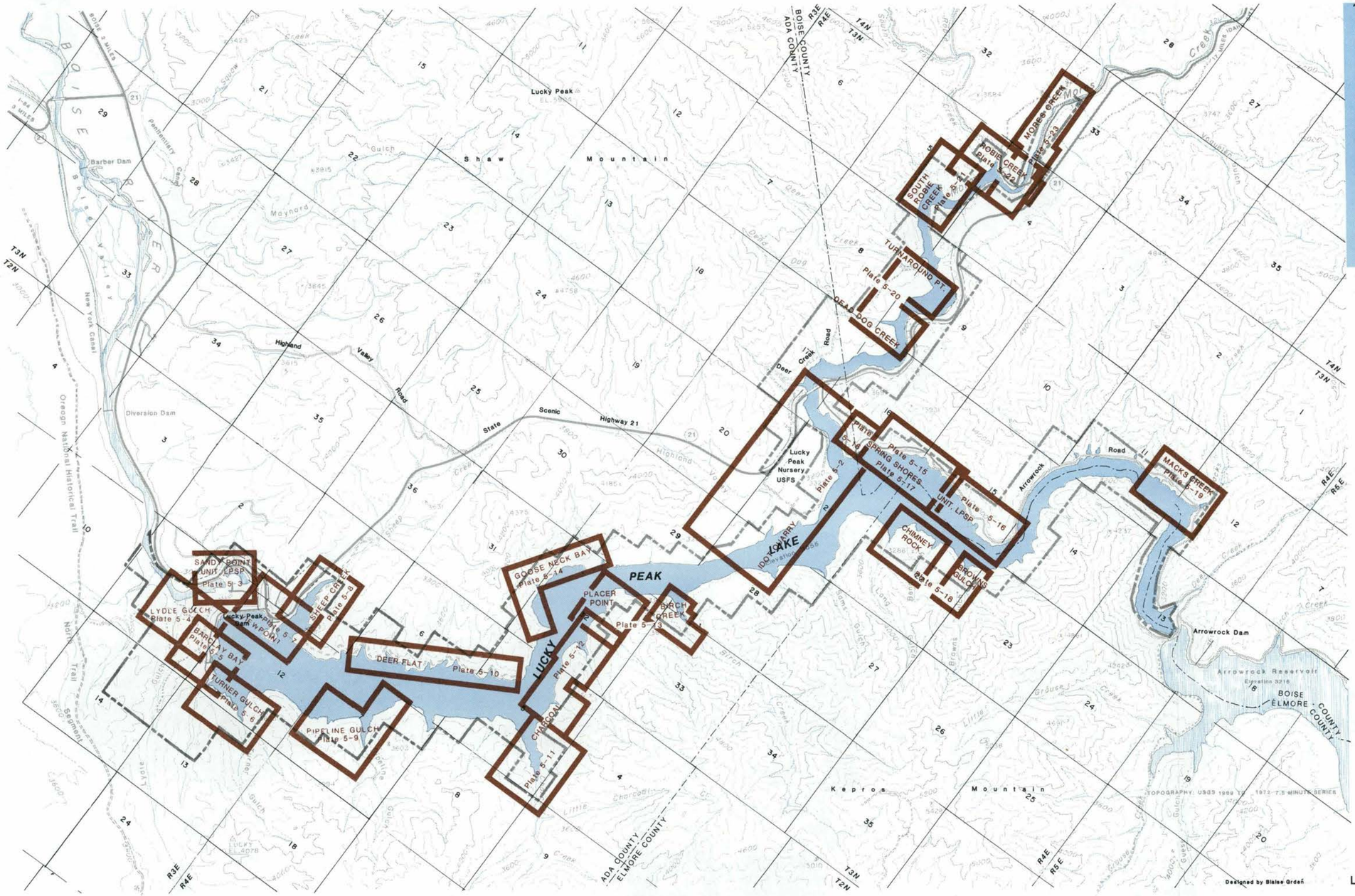
LAND USE

LU-05-47/1-4-1 JULY 1988 PLATE 4-1

5

MANAGEMENTS UNITS DESCRIPTION AND OBJECTIVES

SECTION 5 - MANAGEMENT UNITS DESCRIPTION AND OBJECTIVES



MANAGEMENT UNIT Plate

Barclay Bay	5-5
Birch Creek	5-13
Browns Gulch	5-18
Charcoal	
north	5-11
south	5-12
Chimney Rock	5-18
Deer Flat	5-10
Goose Neck Bay	5-14
IDFG East	5-24
IDFG North	5-24
IDFG West	5-24
IDOT Quarry	5-2
Lucky Peak Dam	
north	5-3
south	5-4
Lucky Peak Viewpoint	5-7
Lydle Gulch	5-4
Macks Creek	5-19
Mores Creek	5-23
Pipeline Gulch	5-9
Placer Point	5-13
Robie Creek	5-22
Sandy Point Unit LPSP	5-3
Sheep Creek	5-8
South Robie Creek	5-21
Spring Shores Unit LPSP	
marina area	5-15
outlying area	5-16
marina area proposed	5-17
Turnaround Point	5-20
Turner Gulch	5-6

4,000 3 2 1 0 FEET
1/2 1 MILES
100 ACRES

US ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WALLA WALLA, WASHINGTON

TOPOGRAPHY: USGS 1988 TO 1973 7.5 MINUTE SERIES

Designed by Blaise Grdan

Lucky Peak Lake

MANAG. UNIT MAP INDEX

LU-05-47/1-5-1 1988 PLATE 5-1

LUCKY PEAK DAM

IDOT QUARRY

SANDY POINT UNIT LPSP

LYDLE GULCH

BARCLAY BAY - TURNER GULCH

LUCKY PEAK VIEWPOINT

SHEEP CREEK

PIPELINE GULCH

DEER FLAT

CHARCOAL

PLACER POINT

BIRCH CREEK

GOOSE NECK BAY

SPRING SHORES UNIT LPSP

CHIMNEY ROCK

BROWNS GULCH

MACKS CREEK

DEAD DOG CREEK

TURNAROUND POINT

SOUTH ROBIE CREEK

ROBIE CREEK

MORES CREEK

IDFG WEST

IDFG EAST

IDFG NORTH

LUCKY PEAK LAKE

SECTION 5 - MANAGEMENT UNITS DESCRIPTION AND OBJECTIVES

5.01. GENERAL.

Lucky Peak project has been divided into 26 individual management units. A management unit is a particular tract of land distinguished and managed to achieve or contribute towards achievement of a project objective(s). An important section of each management unit is the RO's. Management unit RO's communicate site-specific application of the project-wide objectives identified in Section 3. In combination, these RO's intend to wholly or partially satisfy regional recreational needs and the expressed desires of other agencies and the public within the limits and capabilities of the project resource base. The management units as described in this section contain the following components: (1) Land Use Classification, (2) Acres, (3) Unit Description, (4) Influencing and Constraining Factors, (5) Resource Objectives, and (6) Development and Management Concepts. The following is a detailed outline and explanation of the components listed under each management unit.

a. Name of Management Unit - Assigned name of management unit, usually after a local physical feature.

(1) Land Use Classification - One of the four classifications (Recreation Intensive, Recreation Low Density, Wildlife, and Project Operations) as defined in Section 4 which identifies the primary management function of each management unit of the project.

(2) Acres - The total number of acres within the management unit.

(3) Unit Description - Description of the ecological, cultural, and aesthetic features within the management unit.

(a) Ecological Factors.

1. Landform - Description of the landform.

2. Orientation - The direction the unit faces; i.e., north, south, etc.

3. Percent of Slope - The steepness of the slopes; also see Plate 3-1 in the TA.

4. Soils - List of soils. See the paragraph on soils and Plate 3-2 in the TA. (Some areas in Elmore and Boise Counties have not been surveyed.)

5. Vegetation - A list of trees and shrubs inventoried in the management unit. Units without trees and shrubs are labeled native grasses and forbs. For a list of forbs and grasses see Item 5 of Section 6, Supporting Data, in the TA.

6. Water Resources - The name and type of streams or water sources in or next to the management unit (perennial flow 90 percent of the year, intermittent flow 50 percent, and ephemeral flow 50 percent or less).

7. Wildlife Resources - A list of wildlife species. Also, in the TA - Volume 2, see Section 6, Item 6, Wildlife and Fish Checklist of Lucky Peak Lake Project and Southwestern Idaho, and Item 7, Bird Checklist of Lucky Peak Lake Project.

(b) Cultural Factors.

1. Access - Type of access to management unit; i.e., road, water, etc.

2. Utilities - Used or available within close proximity.

3. Land Ownership/Management - Government and/or agency which owns the land and the agency which is responsible for the management of the unit.

4. Outgrants - Grantee, contract number, purpose, type of instrument. (Real estate outgrants which allow use of project lands by other agencies or individuals. See Plate 3-9 and Table 3-5 in the TA - Volume 2.)

5. Adjacent Management Units - Other management units which are contiguous to the management unit.

6. Adjacent Ownership/Management Outside Project - Government or agency which owns lands and is responsible for management of lands immediately

adjacent to the project boundary. If ownership is an individual or corporation, the land will be identified as private. There are instances of lands inside the project which are owned or managed by another agency (either USFS, USBR, or IDOT). These lands are listed here with "inside project" label.

7. Existing Developments - List of developments within the management unit.

8. Visitor Use - Type of visitor use; i.e., sightseeing, picnicking, and boating.

9. Archaeological-Historical Resources - List of archaeological-historical resources which existed or exist in the management units. Also, refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors - List of visual and/or auditory and olfactory factors within or perceived from the management unit.

(4) Influencing and Constraining Factors.

A summary of conditions that may limit or promote implementation of proposed objectives. It includes a discussion of potential environmental, social, and administrative tradeoffs that may occur.

(5) Resource Objectives.

(a) Objective - Brief statements specifying the RO's for each management unit. Most management units have more than one objective. Primary objectives are presented in upper case letters. Other than identifying primary and secondary objectives, objectives have not been prioritized.

(b) Rationale - A discussion of the need and intent of the identified objective(s).

(6) Development and Management Concepts.

A detailed description of the uses, developments, and management techniques that should be undertaken to implement the objectives. The concepts discussed in this section are not all-inclusive. Rather, they are intended to convey an understanding of the type of development and management strategies and techniques envisioned as a means to implement the objectives. The ultimate decisions regarding the method(s) of objective implementation rest with the OMP. Plates 5-2 through 5-24 illustrate the existing and potential project development concepts. Readers should refer to these plates as they study discussions of specific management units.

5.02. PROJECT OPERATIONS.

Under the land use classification of Project Operations there are two management units, Lucky Peak Dam and IDOT Quarry Management Unit, totaling 140.7 acres.

PROJECT OPERATIONS
Management Units

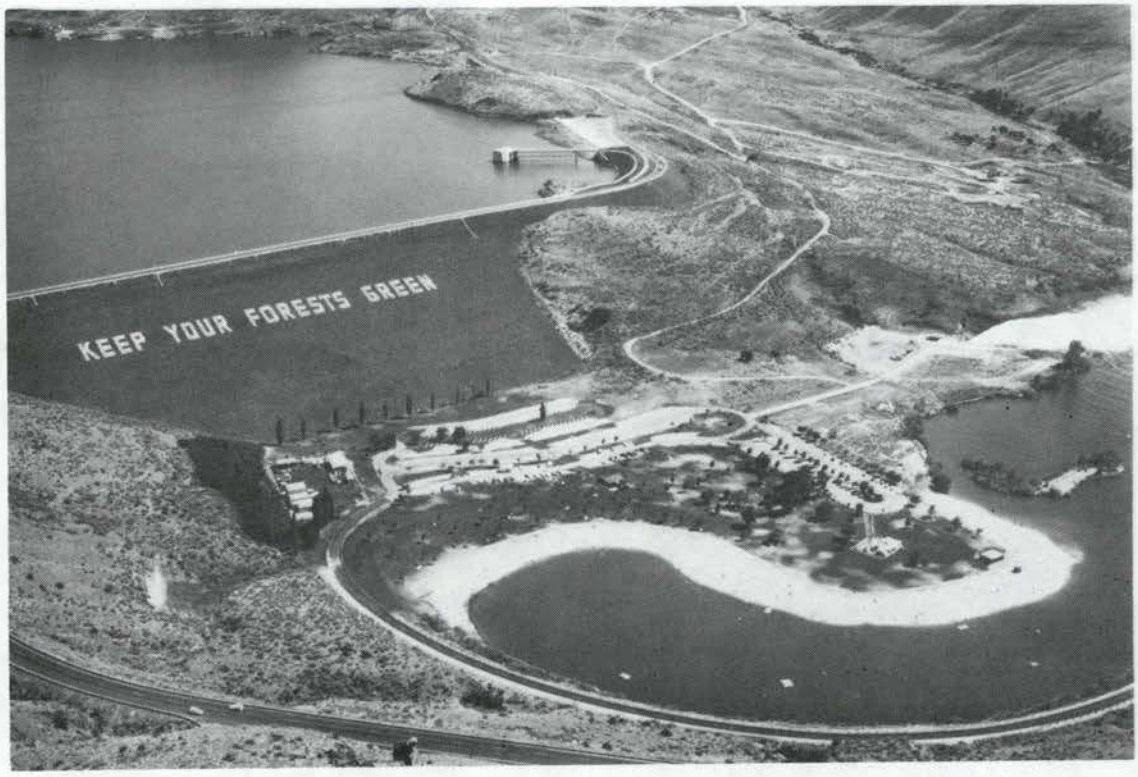


PHOTO 5-1. Lucky Peak Dam Management Unit and Sandy Point Management Unit.

a. Lucky Peak Dam Management Unit.

(1) Land Use Classification - Project Operations.

(2) Acres - 97.9.

(3) Unit Description.

(a) Ecological Factors.

1. Landform - The dam is located inside a narrow portion of the Boise River canyon. Except for the area around the project office, the land is steep.

2. Orientation - Northwest.

3. Percent of Slope - 0-15 percent (project office area), 15-25 percent, and 25+ percent.

4. Soils - Gem silty clay loam, 2- to 15-percent slopes (63); gem-rock outcrop complex, 5- to 40-percent slopes (64); Lankbush-Brent sandy loam, 4- to 12-percent slopes (89); and Notus soils (112).

5. Vegetation - Antelope bitterbrush, sumac, ponderosa pine, and black cottonwood.

6. Water Resources - Boise River and Lucky Peak Lake.

7. Wildlife Resources - Bald eagle, golden eagle, mule deer, redtail hawk, California quail, and cottontail.

(b) Cultural Factors.

1. Access - State Highway 21, project entrance road, and dam crest road.

2. Utilities - Electricity (480-volt) and telephone.

3. Land Ownership/Management - USA/USACE.

4. Outgrants - Boise Chamber of Commerce, 104-14, Sign on Dam, and Letter Permit.

5. Adjacent Management Units - Sandy Point Unit, LPSP; Lydle Gulch; and Barclay Bay-Turner Gulch.

6. Adjacent Ownership Outside Project - Private.

7. Existing Developments - Lucky Peak Dam, project office, flush toilets with septic tank leach field, project storage yard, outlet works, second outlet, uncontrolled spillway, and powerhouse.

8. Visitor Use - Business, information, and sightseeing.

9. Archaeological-Historical Resources - Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

1. Positive - Rock-faced dam.

2. Negative - Architectural design of headquarters and maintenance yard. Inappropriate large-scale size of "Keep Your Forests Green" sign on the face of Lucky Peak Dam.

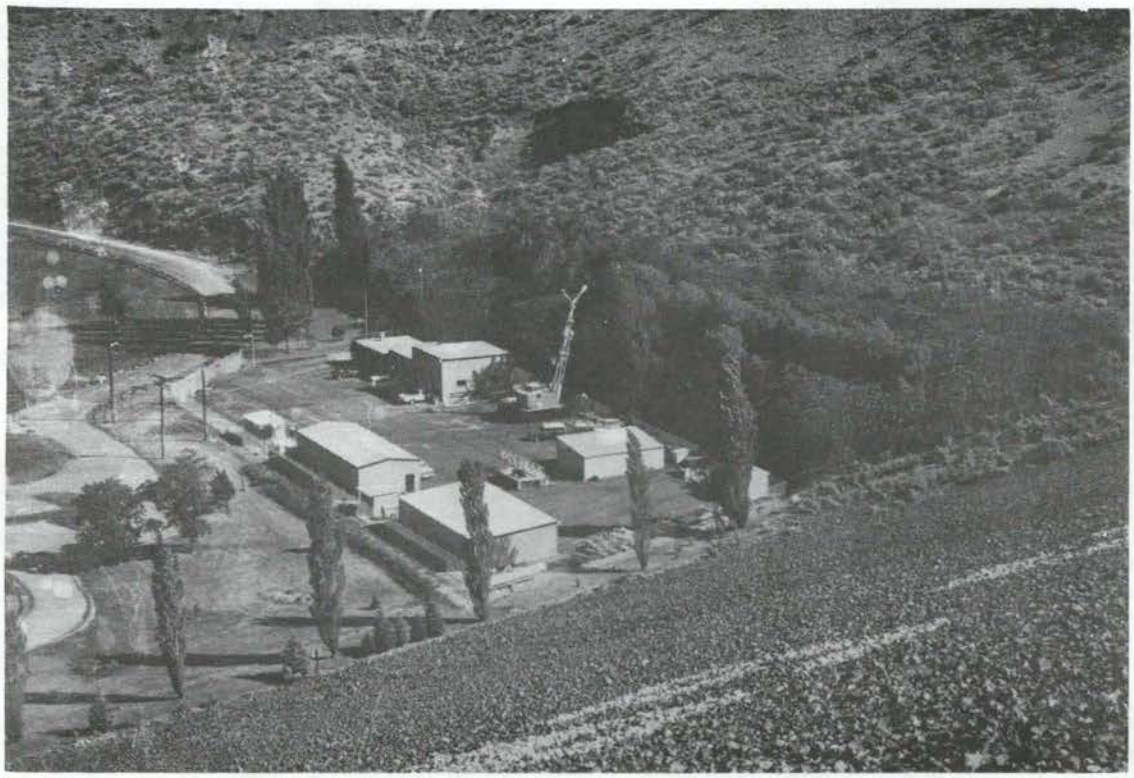


PHOTO 5-2. Lucky Peak project office at the base of the dam.

(4) Influencing and Constraining Factors.

The Lucky Peak project was authorized primarily for flood control. Since bald eagles use the cottonwood trees by the dam outlet, the trees must not be removed or their attractiveness to eagles diminished.

(5) Resource Objectives.

(a) Objectives.

1. ENSURE CONTINUED SAFE AND EFFICIENT OPERATION OF LUCKY PEAK DAM AND MAINTENANCE AND ADMINISTRATION OF THE PROJECT.

2. Provide visitors with an aesthetically pleasing environment.

3. Enhance visitor opportunities to view and understand the project.

4. Maintain bald eagle habitat.

(b) Rationale.

1. This unit is needed to meet the project's primary authorized purpose - flood control.

2. The maintenance areas at the project headquarters and the new powerhouse need to be screened from the visitors, especially people from Sandy Point.

3. Over 80 percent of the public is not aware that the Corps of Engineers operates the project. Information should be available to the public to help them understand the project and the Corps.

4. The cottonwood trees by the outlet are used by bald eagles as hunting perches. Bald eagles are an endangered species in Idaho and their habitat must be maintained.

(6) Development and Management Concepts.

(a) Refer to Plate 5-3, Sandy Point, and Plate 5-4, Lydle Gulch, for conceptual development plan for dam management unit.

(b) Develop plans to relocate Lucky Peak project office to Viewpoint.

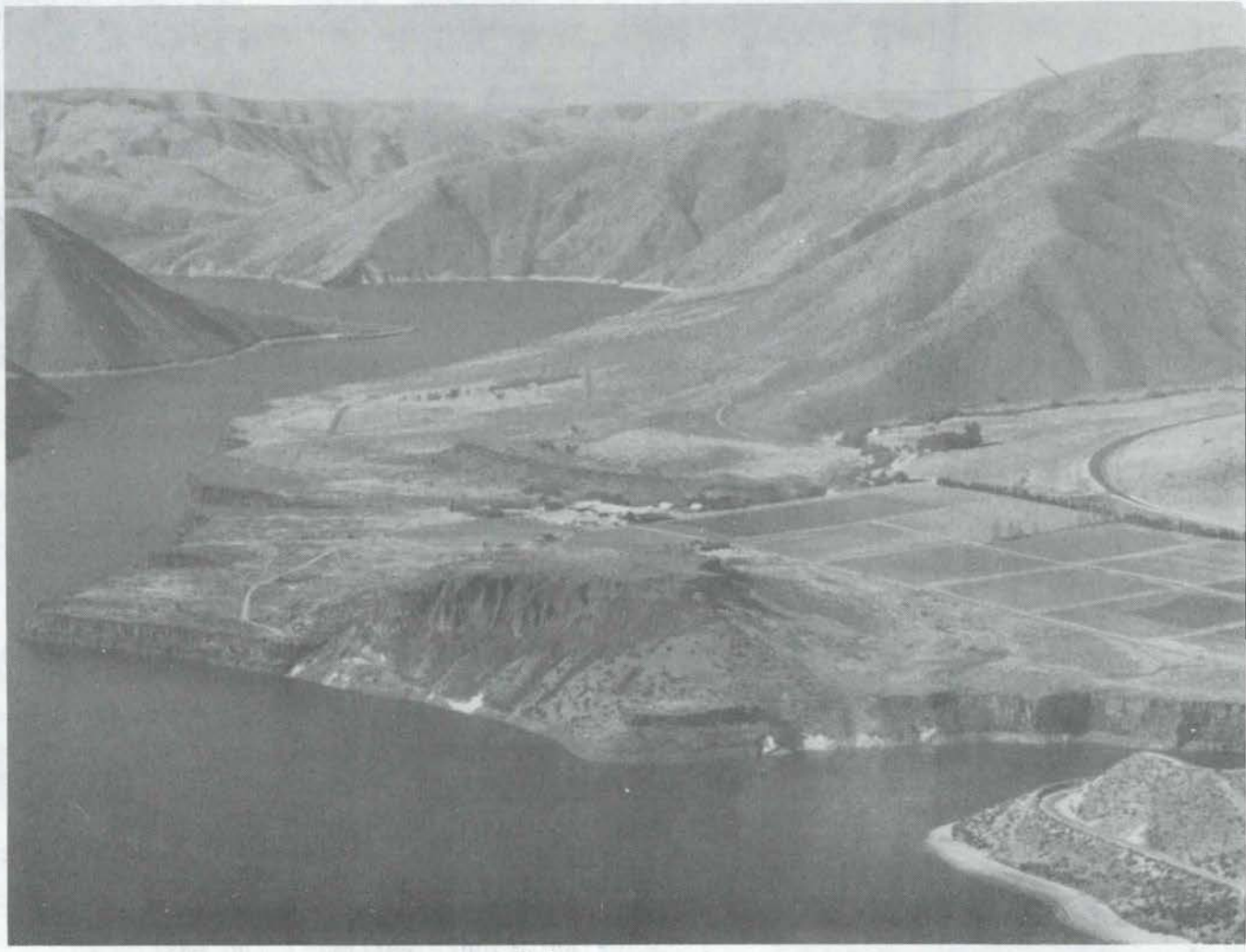


PHOTO 5-3. IDOT Quarry Management Unit.

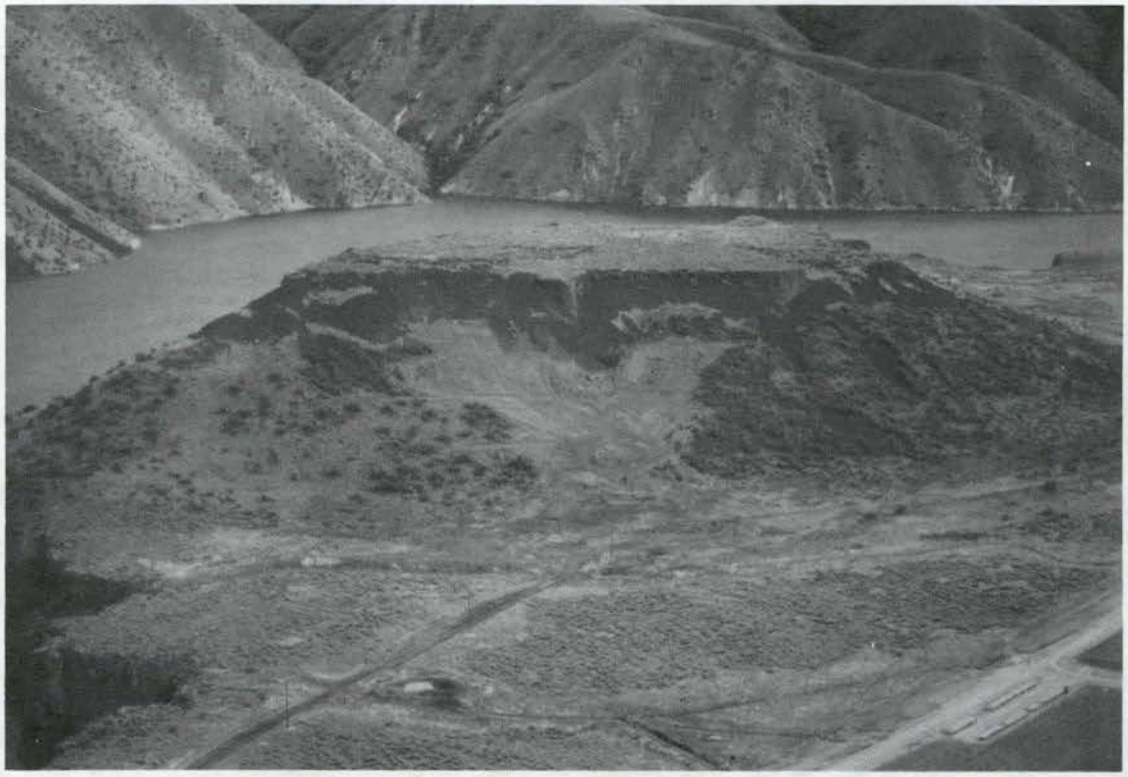


PHOTO 5-4. IDOT Quarry Management Unit - Viewing south, the quarry is located in the center of the photograph.

b. IDOT Quarry Management Unit.

(1) Land Use Classification - Project Operations.

(2) Acres - 42.8 (includes access road from Highway 21).

(3) Unit Description.

(a) Ecological Factors.

1. Landform - Flat along access road and steep at the quarry site.

2. Orientation - Northwest and east.

3. Percent of Slope - 0-15 and 25+ percent.

4. Soils - Rubble land (159).

5. Vegetation - Native grasses and forbs.

6. Water Resources - None.

7. Wildlife Resources - Golden and bald eagles, mule deer, and weasel.

(b) Cultural Factors.

1. Access - State Highway 21 and gravel access road. The gravel access road is part of the quarry management unit.

2. Utilities - None.

3. Land Ownership/Management - USA/USACE.

4. Outgrants - IDOT, 83-17, Access Road Right-of-Way Easement, expires 13 June 1993.

5. Adjacent Management Units - IDFG West.

6. Adjacent Ownership/Management Outside Project - USA/USFS (Lucky Peak Nursery).

7. Existing Developments - Quarry and access road.

8. Visitor Use - None.

9. Archaeological-Historical Resources - Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

There would be a negative visual impact if the quarry is enlarged so it can be viewed from the lake, recreation areas, or State Highway 21.

(4) Influencing and Constraining Factors.

The state's right to the site and use for material source is perpetual. (USBLM, Land and Survey Office, Decision - Idaho 01256, 30 January 1951.)

(5) Resource Objectives.

(a) Objectives.

1. PROVIDE ACCESS TO MATERIAL SOURCE FROM MATERIALS SOURCE AD-74 ADA COUNTY SITE (SE 1/4, NW 1/4, Sec. 21, T. 3 N., R. 4 E., B.M.).

2. Protect the visual quality from the lake.

3. Manage the site for wildlife.

(b) Rationale.

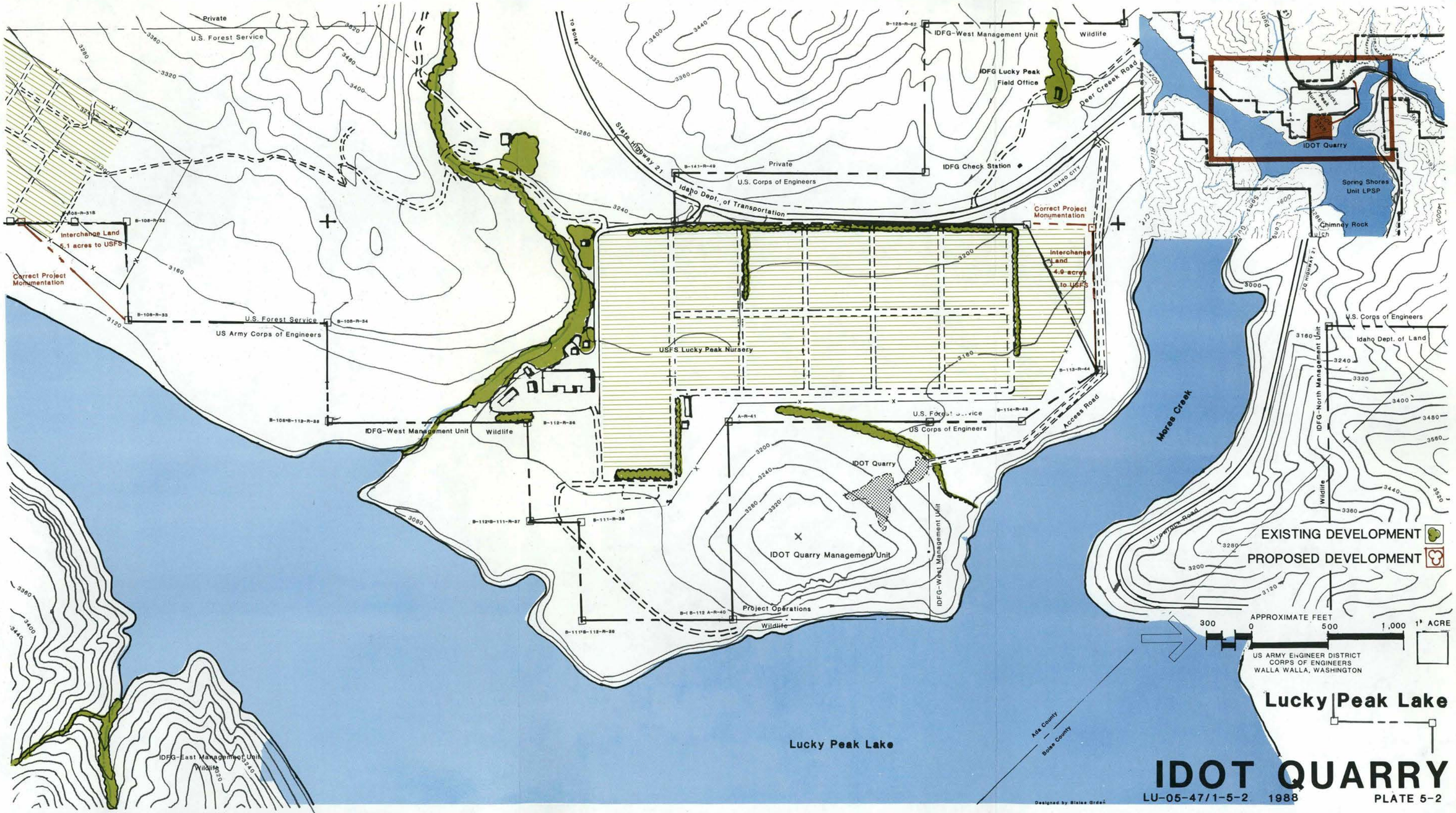
1. The State of Idaho has a perpetual right to remove material from the site for Federal Aid Highways as authorized by USBLM Decision - Idaho 01256, 30 January 1951.

2. Lucky Peak project contains high quality visual resources. These resources need to be protected by planning and management techniques to ensure continued high scenic quality is provided to the public. See project RO Number 12 in Section 3.

3. Wildlife species are an integral part of the natural environment and provide enjoyment for many recreationists in the form of wildlife viewing and hunting. Also, as mule deer winter range on surrounding lands becomes more scarce, these lands will become more important.

(6) Development and Management Concepts.

The area now developed as a quarry is only a small area of Site AD-74. Refer to Plate 5-2. To protect visual quality, the state will be encouraged to confine its activity to an area that will not be visible from the lake, recreation areas, or Highway 21. Much of the remainder of the site is utilized by mule deer for winter range. These areas will be maintained and protected for this purpose.



IDOT QUARRY

LU-05-47/1-5-2 1988 PLATE 5-2

5.03. RECREATION.

There are 20 management units totaling 1,074.0 acres which are classified Recreation Intensive Use and Recreation Low Density. Recreation facilities at Lucky Peak help meet the regional need for recreation within the PSMA. As shown in the TA - Volume 2, the SCORP report projected needs to increase into the year 2000. Within Lucky Peak PSMA, recreation activities will increase into the year 2000. Boating will increase 89 percent, water skiing 94 percent, fishing 56 percent, swimming 99 percent, picnicking 206 percent, hunting 52 percent, sightseeing 141 percent, and bicycling 96 percent. Maintenance and expansion of recreation facilities at Lucky Peak Lake will help meet these needs.

RECREATION
Management Units

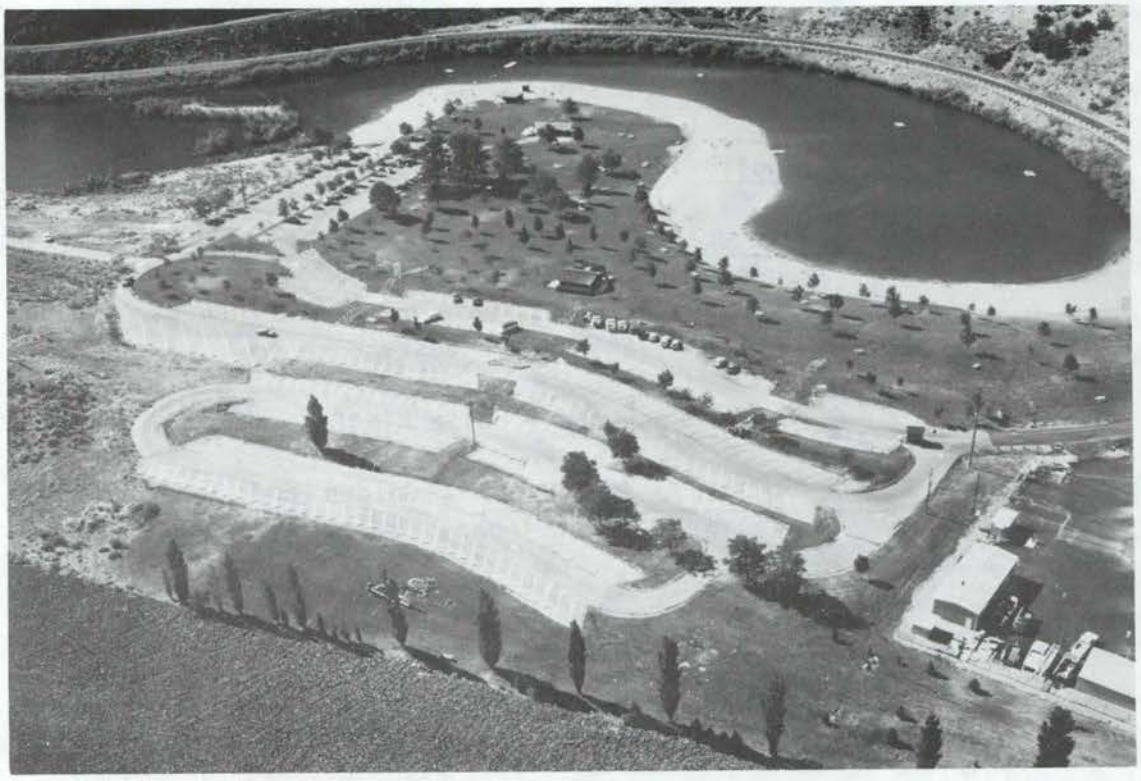


PHOTO 5-5. Sandy Point Unit LPSP Management Unit - This photo was taken before the islands in the top left of the photo were covered with a causeway for access for the new powerhouse.

a. Sandy Point Unit LPSP Management Unit.

(1) Land Use Classification - Recreation Intensive.

(2) Acres - 23.5.

(3) Unit Description.

(a) Ecological Factors.

1. Landform - Flat area between the dam and the original river channel.

2. Orientation - Flat.

3. Percent of Slope - 0-5 percent.

4. Soils - Notus (112).

5. Vegetation - Hackberry, black locust, sumac, honey locust, eastern and black cottonwood, sandbar willow, antelope bitterbrush, golden currant, and Wood's rose.

6. Water Resource - Boise River.

7. Wildlife Resources - Golden and bald eagles, mallard, kingfisher, common merganser, and songbirds.

(b) Cultural Factors.

1. Access - State Highway 21 and project entrance road (paved).

2. Utilities - Electricity and telephone.

3. Land Ownership/Management - USA/IDPR.

4. Outgrants - IDPR (67-141) expires 7 May 2002.

5. Adjacent Management Units - Lucky Peak Dam.

6. Adjacent Ownership Outside Project - Private.

7. Existing Developments - 61 picnic tables, 2 flush restrooms with septic tanks, drinking water, food service (snack bar), 403 auto parking, large swimming area, 8 swim docks, charcoal grills, kiosk, irrigated lawn area with shade trees, water inlets and diffuser, and entrance fee kiosk (begun in 1981).

8. Visitor Use - 160,000 average annual visitors, swimming, sunbathing, and picnicking.

9. Archaeological-Historical Resources - Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

1. Positive - The large sandy beach, high surrounding hills, and the Boise River offer excellent scenic resources.

2. Negative - View of Corps maintenance yard and project office.

(4) Influencing and Constraining Factors.

There is no area for expansion. The fill area across the river and the possibility of relocating the Corps office would allow room for expansion. Water quality and water temperatures at the swimming area may be affected by the road fill placed in the Boise River for the new powerhouse currently under construction. If this occurs, the BPBC is responsible to correct the problem.

(5) Resource Objectives.

(a) Objectives.

1. CONTINUE TO PROVIDE AND ENHANCE INTENSIVE DAY-USE RECREATION AT THIS UNIT OF LPSP WITH THE PRIMARY EMPHASIS ON SWIMMING.

2. Protect and enhance the unit's visual resource.

3. Improve access to unit.

(b) Rationale.

1. Sandy Point is a unit of LPSP which receives more visitation than any other state park in Idaho. The need for swimming facilities, as

shown in TA - Volume 2, will continue into the year 2000. Sandy Point has one of the best swimming facilities in the region due to its close proximity to the city of Boise, its sandy beach, and ideal water temperatures which may change due to new fill across the river channel.

2. The high visitation, visibility of the management unit from Highway 21, and public expectations in visiting public resource areas are the main reasons to protect and enhance the visual resource.

3. Currently, the management unit is only served by automobile and the trail which ends at Discovery Unit. Extension of the bicycle and foot trail at Discovery will improve safety and will allow the automobile parking area to serve the public before the parking shortage occurs.

(6) Development and Management Concepts.

(a) Refer to Plate 5-3 for conceptual site development plan for Sandy Point.

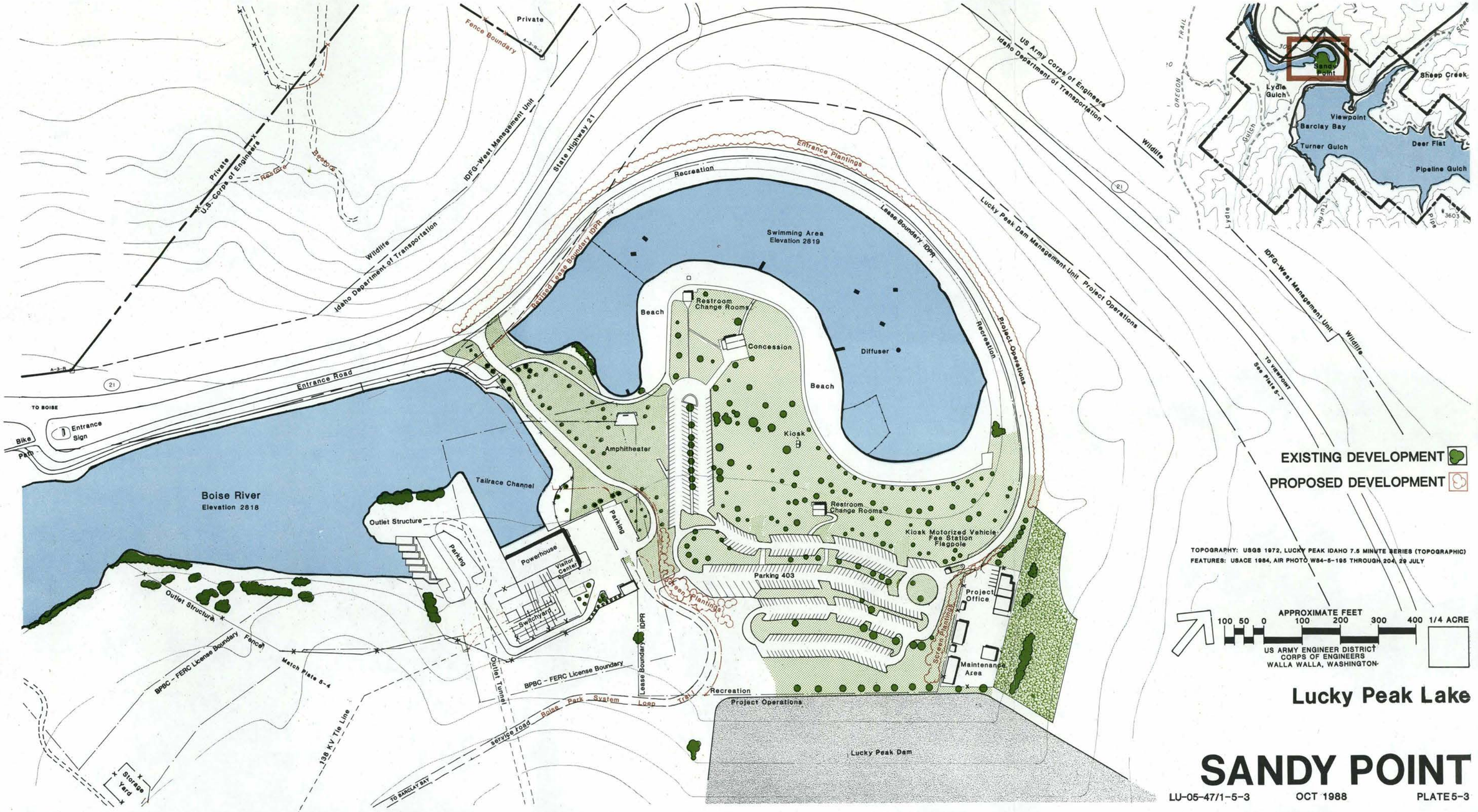
(b) Monitor and maintain suitable water quality and conditions for swimming.

(c) Extend day-use area across new fill area.

(d) Provide an area for IDPR maintenance equipment after the project office is moved to Viewpoint.

(e) Improve aesthetics of the area by additional tree and shrub planting to provide a unified appearance, screening, and shade.

(f) Extend bicycle trail on project lands from Discovery Unit to Sandy Point Unit and a gravel trail to continue across project lands as part of the Boise Park Loop Trail.



SANDY POINT

LU-05-47/1-5-3 OCT 1988 PLATE 5-3

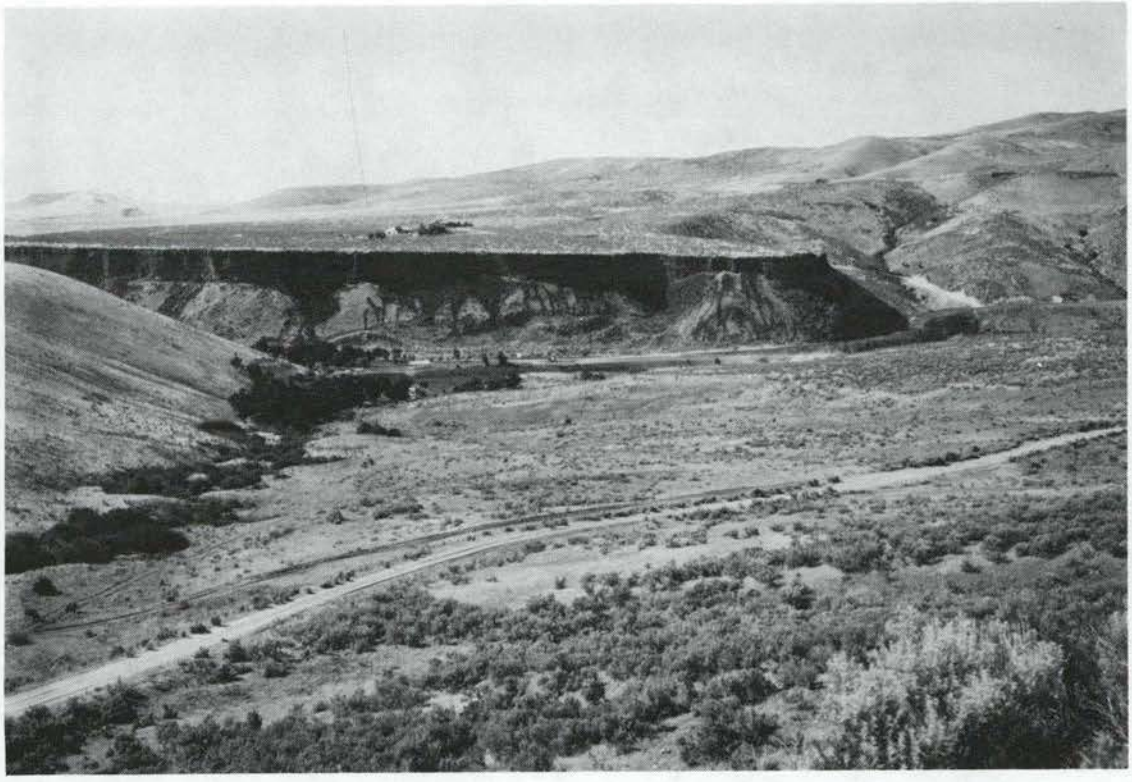


PHOTO 5-6. Lydle Gulch Management Unit - is located in the bottom half of this photograph.

b. Lydle Gulch Management Unit.

(1) Land Use Classification - Recreation Low Density.

(2) Acres - 60.8.

(3) Unit Description.

(a) Ecological Factors.

1. Landform - Gentle rolling slopes at the mouth of Lydle Gulch.

2. Orientation - North, northeast.

3. Percent of Slope - 0-15 and 25+ percent.

4. Soils - Ada gravelly sandy loam, 4- to 15-percent slopes (2); Brent loam, 12- to 30-percent loam (17); gem-rock outcrop complex, 5- to 40-percent slopes (64); Ladd-Ada complex, 30- to 60-percent slopes (83); Tenmile very

gravelly loam, 0- to 4-percent slopes (174); and Tenmile very gravelly loam, 30- to 65-percent slopes (177).

5. Vegetation - Black locust and native forbs and grasses.

6. Water Resources - Lydle Gulch (perennial stream) and Boise River.

7. Wildlife Resources - Golden eagle, chukar, songbirds.

(b) Cultural Factors.

1. Access - State Highway 21, dam crest road (paved), and Lydle Gulch Road (gravel).

2. Utilities - None.

3. Land Ownership/Management - USA/USACE.

4. Outgrants - Part of unit is under IDFG, 83-10, Wildlife, license expires 16 December 2007.

5. Adjacent Management Units - Barclay Bay-Turner Gulch, Lucky Peak Dam, and IDFG East.

6. Adjacent Ownership - USA/USBR (inside project); USA/USBLM and private (outside project).

7. Existing Developments - 4 picnic tables.

8. Visitor Use - Fishing, picnicking, and sightseeing.

9. Archaeological-Historical Resources - Foote House and Lydle Gulch site; also, refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

Boise River, view of basalt cliffs down canyon.

(4) Influencing and Constraining Factors.

Any activity that may disturb archaeological/historical properties in the management unit needs to be coordinated with the State Historical Preservation Office, Idaho State Historical Society.

(5) Resource Objectives.

(a) Objectives.

1. CONTINUE TO MAINTAIN LOW-DENSITY RECREATION.

2. Protect archaeological-historical resources.

3. Provide an interpretive facility for archaeological and historical resources.

4. Improve habitat for cavity-nesting birds.

(b) Rationale.

1. This management unit is now and will continue to help meet regional recreational needs as shown in TA - Volume 2.

2. The Corps of Engineers is required by Public Law 93-291 and other statutes to protect archaeological and historical properties.

3. The history associated with the Foote House is extremely colorful and interesting and offers a unique opportunity to provide interpretive facilities. See TA, Section 3, paragraph (f), "The Foote House," page 3-32. The State Historical Society and University of Idaho have requested that interpretive facilities be developed at the site.

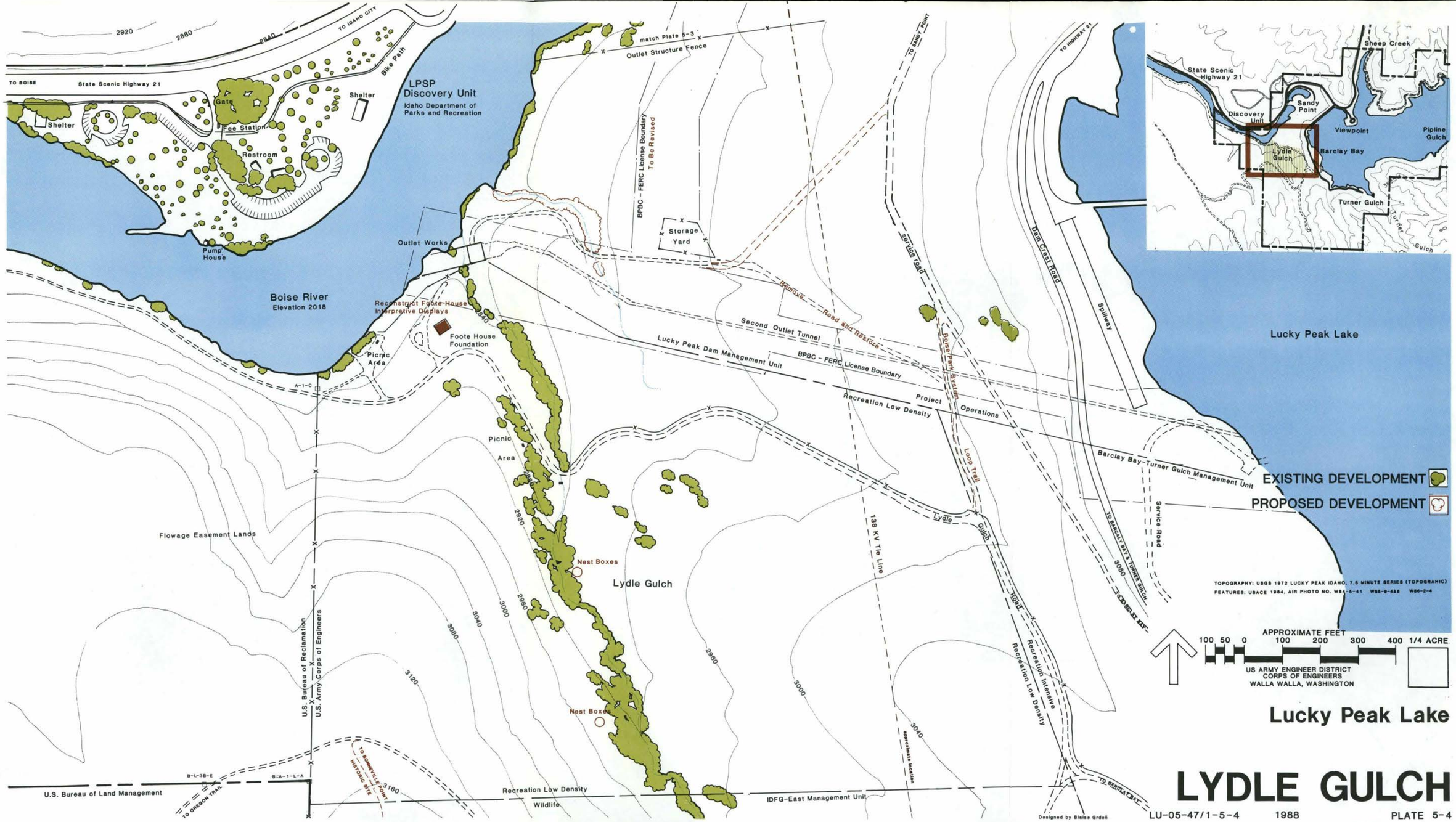
4. Suitable cavities for cavity-nesting birds are not available. The installation of nest boxes will increase the numbers of the birds available for viewing by recreationists.

(6) Development and Management Concepts.

(a) Refer to Plate 5-4 for conceptual development plan for Lydle Gulch.

(b) Develop interpretive information facilities and/or displays at the Foote House.

(c) Install nest boxes for cavity-nesting birds.



Lucky Peak Lake

LYDLE GULCH

LU-05-47/1-5-4 1988 PLATE 5-4

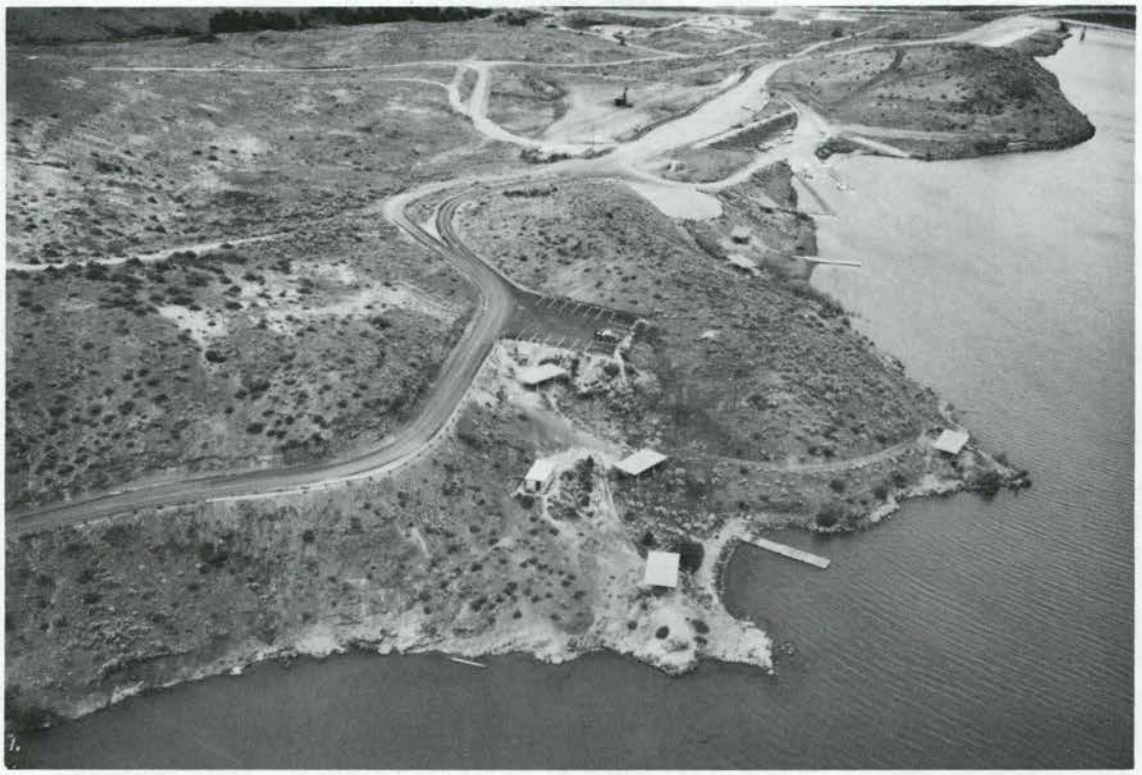


PHOTO 5-7. Barclay Bay.

PHOTO 5-8. Turner Gulch.

c. Barclay Bay - Turner Gulch Management Unit.

(1) Land Use Classification - Recreation Intensive.

(2) Acres - 76.0.

(3) Unit Description.

(a) Ecological Factors.

1. Landform - Steep slopes.

2. Orientation - North (Turner Gulch), East (Barclay Bay).

3. Percent of Slope - 25+ percent.

4. Soils - Gem-rock outcrop complex, 5- to 40-percent slopes (64).

5. Vegetation - Austrian pine, mountain ash, Mugo pine (irrigated), black locust, willows, antelope bitterbrush, golden currant, and Wood's rose.

6. Water Resources - Lucky Peak Lake and Turner Gulch (intermittent).

7. Wildlife Resources - Coyote, mule deer, golden and bald eagles, California quail, cottontail, and songbirds.

(b) Cultural Resources.

1. Access - State Highway 21 and dam crest road.

2. Utilities - Electricity (Barclay Bay only).

3. Land Ownership/Management - USA/USACE.

4. Outgrants - None.

5. Adjacent Management Units - Lydle Gulch, IDFG East.

6. Adjacent Ownership Outside Project - USBLM and private.

6. Adjacent Ownership Outside Project - USBLM and private.

7. Existing Developments - 8 sunshelters (with picnic tables), 4 tie-up docks, 3 restrooms, well, pumphouse, drinking water, parking for 44 autos and 81 vehicles with trailers at Barclay Bay, and parking for 80 autos and 50 vehicles with trailers at Turner Gulch. Launching ramps (4 lanes at Barclay Bay, 2 lanes at Turner Gulch) to elevation 3055 at Barclay Bay and elevation 2910 at Turner Gulch. (These parking figures include parking lot improvements completed in 1988.)

8. Visitor Use - Picnicking, boat launching, water skiing, boating, fishing, and sightseeing.

9. Archaeological-Historical Resources - Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

Excellent panoramic views of the lake.

(4) Influencing and Constraining Factors.

Area for expansion is very limited due to steep slopes. The work on the parking area, boat launching ramp, and relocated road is being completed by the BPBC.

(5) Resource Objectives.

(a) Objectives.

1. CONTINUE TO PROVIDE AND INCREASE DAY-USE ACTIVITIES AT BARCLAY BAY-TURNER GULCH WITH PRIMARY EMPHASIS ON BOAT LAUNCHING.

2. Maintain levee structure for flood control purposes.

3. Expand parking and launching ramps to provide visitor access to lake.

4. Improve aesthetics within MU.

5. Increase visitor safety at parking locations.

(b) Rationale.

1. Barclay Bay and Turner Gulch boat launching ramps are the closest ramps at Lucky Peak Lake to the city of Boise. The amount of land available for development is very limited on the entire project. These are the only areas available for expansion of boat launching and parking on the lake. The expansion will help meet the regional needs for boat launching ramps and boating activities as shown in TA - Volume 2.

2. The levee structure serves to control high water during extreme flooding to control waterflows.

3. The current site layout of the parking area, which requires auto trailers to back out into the main access road, is extremely dangerous and needs to be corrected.

(6) Development and Management Concepts.

(a) Refer to Plates 5-5 and 5-6 for conceptual development plan for Barclay Bay and Turner Gulch.

(b) Increase parking at Turner Gulch and Barclay Bay. (Work in progress.)

(c) Widen boat launching ramp at Barclay Bay. (Completed.)

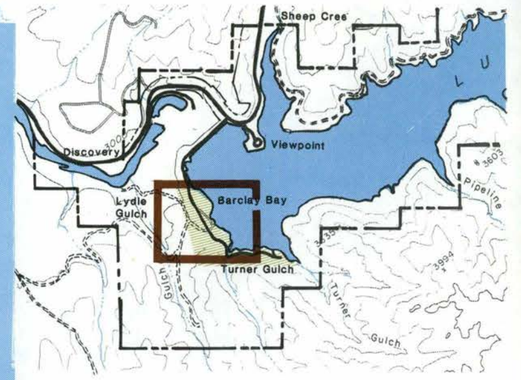
(d) Relocate road around Barclay Bay parking area. (In progress.)

(e) Provide group shelter.

(f) Pave and stripe existing gravel parking lots.

(g) Install telephone and night lighting at Barclay Bay.

(h) Provide landscape plantings for aesthetics and shade.



EXISTING DEVELOPMENT

PROPOSED DEVELOPMENT

TOPOGRAPHY: USACE 1988 PHOTOGRAMMETRIC SURVEY 20 & 27 SEPTEMBER
FILE NO. 88-51 AND 52 AIR PHOTO NO. W88-9-1 THROUGH 4
FEATURES: USACE 1984, AIR PHOTO NO. W84-4-192 THROUGH 208, 29 JULY

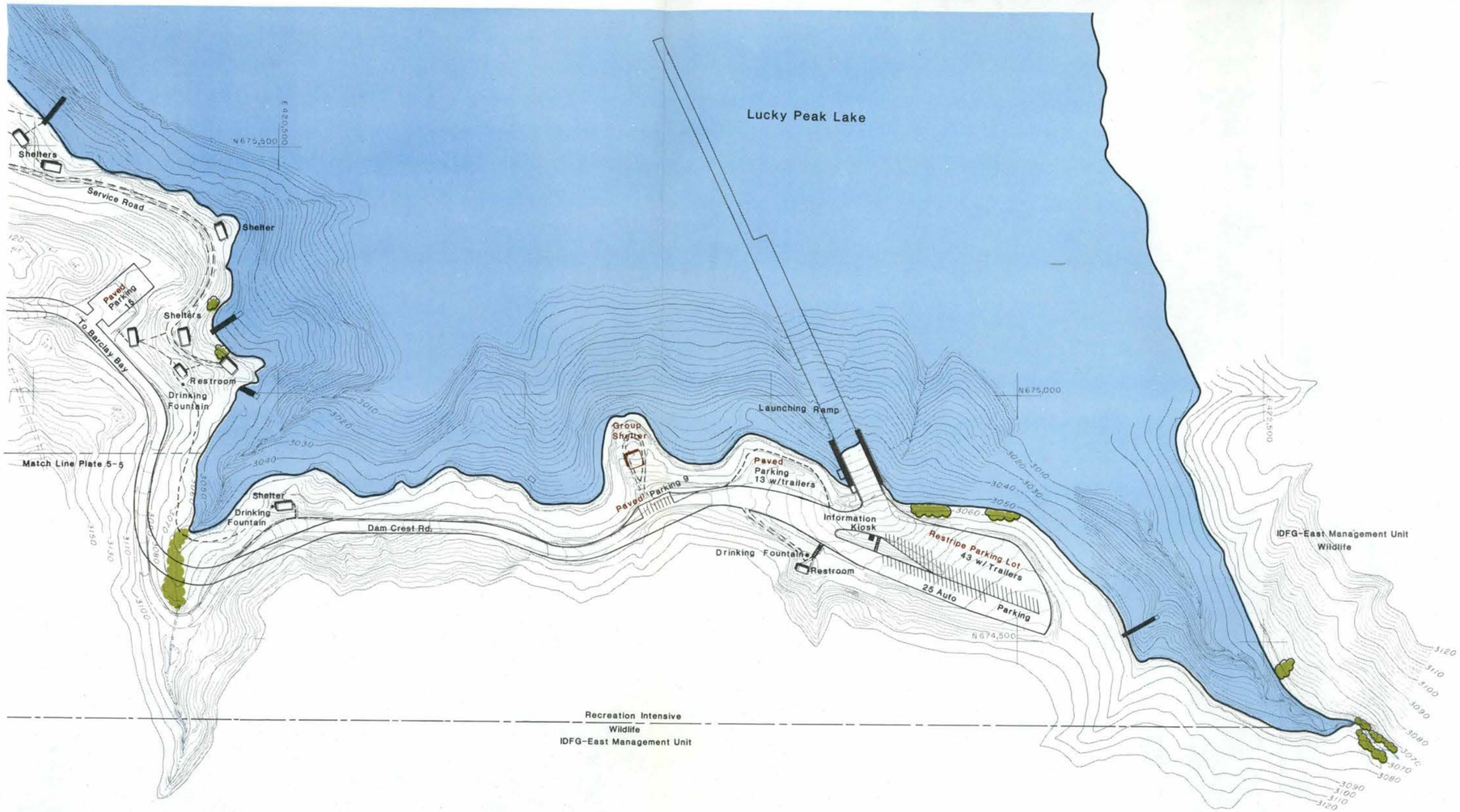
FEET
100 50 0 100 200 300 400 1/4 ACRE

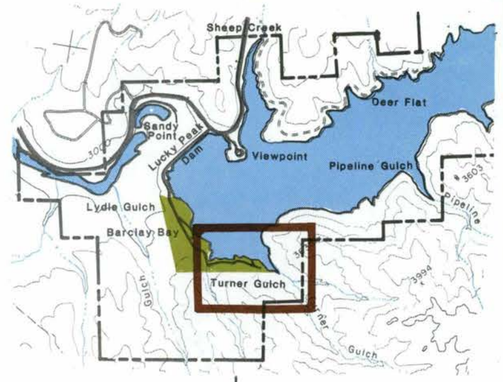
US ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WALLA WALLA, WASHINGTON

Lucky Peak Lake

BARCLAY BAY

LU-05-47/1-5-5 1988 PLATE 5-5





US Corps of Engineers

US Bureau of Land Management

EXISTING DEVELOPMENT

PROPOSED DEVELOPMENT

TOPOGRAPHY: USACE 1985, PHOTOGRAMMETRIC SURVEY 20 & 27 SEPTEMBER, FILE NO. 85-51 & 52
AIR PHOTO NO. W85-9-1 THROUGH 46

FEATURES: USACE 1984, AIR PHOTO W84-4-192 THROUGH 206, 29 JULY

FEET
100 50 0 100 200 300 400 1/4 ACRE

US ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WALLA WALLA, WASHINGTON

U.S. Corps of Engineers

Private

Designed by Blaine Green

LU-05-47/1-5-6

1988

Lucky Peak Lake

TURNER GULCH

PLATE 5-6

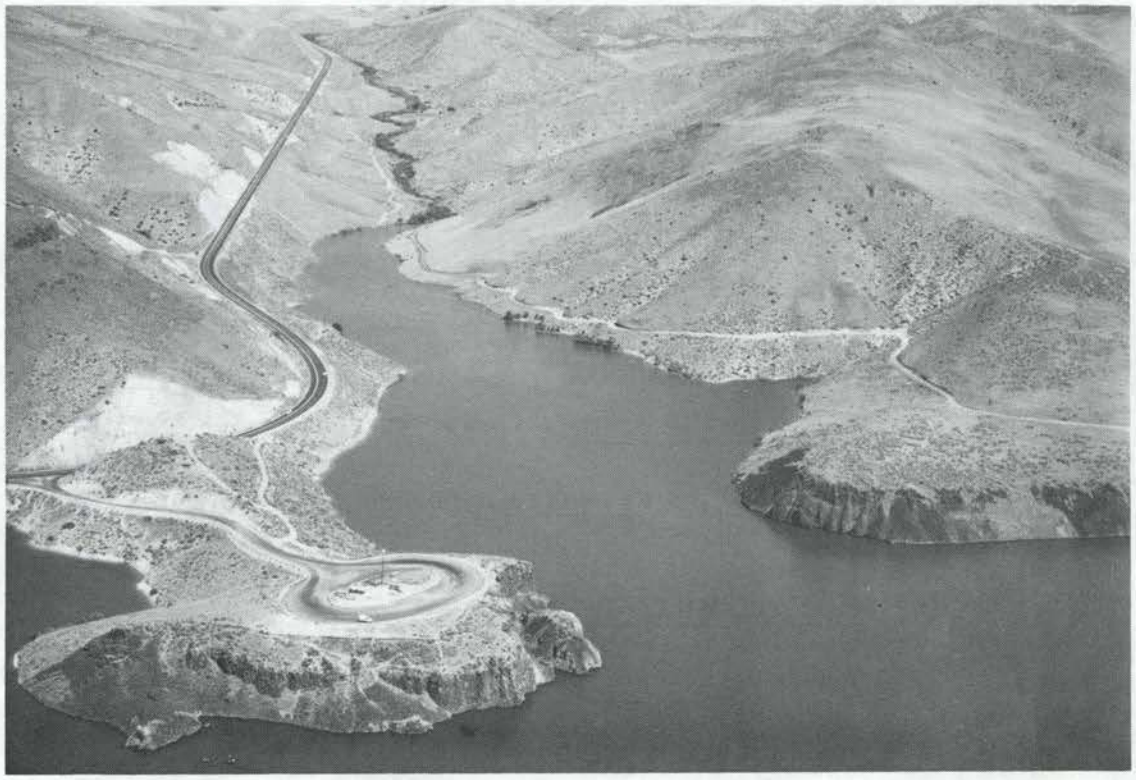


PHOTO 5-9. Lucky Peak Viewpoint Management Unit is located on the rock promontory next to Sheep Creek.

d. Lucky Peak Viewpoint Management Unit.

(1) Land Use Classification - Recreation Intensive.

(2) Acres - 11.1.

(3) Unit Description.

(a) Ecological Factors.

1. Landform - A rock promontory defined by basalt cliffs and very steep slopes.

2. Orientation - Flat.

3. Percent of Slope - Developed area 0-15 percent, other areas 15-100 percent.

4. Soils - Rubble land (159).

5. Vegetation - Austrian pine and green ash (irrigated), willows, antelope bitterbrush, golden currant, and Wood's rose.

6. Water Resource - Lucky Peak Lake.

7. Wildlife Resources - Golden and bald eagles and songbirds.

(b) Cultural Factors.

1. Access - State Highway 21.

2. Utilities - Electricity.

3. Land Ownership/Management - USA/USACE.

4. Outgrants - None.

5. Adjacent Management Units - Sheep Creek, Lucky Peak Dam, and IDFG West.

6. Adjacent Ownership - IDOT (inside project) and private (outside).

7. Existing Developments - 1 vault toilet, shelter, picnic table, refuse container, paved road and parking area, parking for 75 vehicles, 1,500 feet of guardrail, and 1,285 feet of chain link fence.

8. Visitor Use - Sightseeing and picnicking.

9. Archaeological-Historical Resources - Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

1. Positive - Excellent panoramic views of the lake and surrounding mountains.

2. Negative - Condition of facilities, architectural character of vault toilet.

(4) Influencing and Constraining Factors.

The site was originally designed and used as a viewpoint during the construction of Lucky Peak Dam. It is used primarily as a roadside way station along Highway 21. The steep cliff offers a panoramic view of the lake but creates a potential safety problem for visitors. Due to the lack of security, interpretive facilities have been destroyed by vandalism in 1973. The site is underutilized and is one of the few areas which offer opportunity for expansion. The location is excellent with access just off State Highway 21. The area is a gateway to the central Idaho mountains. Lands of many different state and Federal agencies are located in the area.

(5) Resource Objectives.

(a) Objectives.

1. MAINTAIN AND ENHANCE RECREATION INTENSIVE DAY-USE WITH EMPHASIS ON INTERPRETIVE INFORMATION FACILITIES.

2. Provide the public more contact with the Corps.

3. Utilize the opportunities of the management unit.

4. Improve and protect visual quality.

5. Provide a safe visitor environment.

(b) Rationale.

1. The public has the right and need to be informed on public projects and lands. There is no central area on Lucky Peak project for the public to obtain information about the project and its resources and opportunities except at a small kiosk at Sandy Point.

2. Surveys have shown that over 80 percent of the visitors are not aware that the Corps of Engineers operates Lucky Peak project.

3. The site is very underutilized considering the space available for parking (75 units), excellent panoramic views, and excellent access from Highway 21 for people traveling into central Idaho and visitors to Lucky Peak Lake. The site offers an area for the construction of an office/visitor center facility. Such a facility would allow a central area for interpretive information and provide greater public access to interpretive information and Corps personnel. Relocation of the office from Sandy Point would also provide additional parking and a maintenance area for Sandy Point LPSP.

4. Due to the excellent views and natural features offered by the unit, the scenic quality needs to be protected for the visitors.

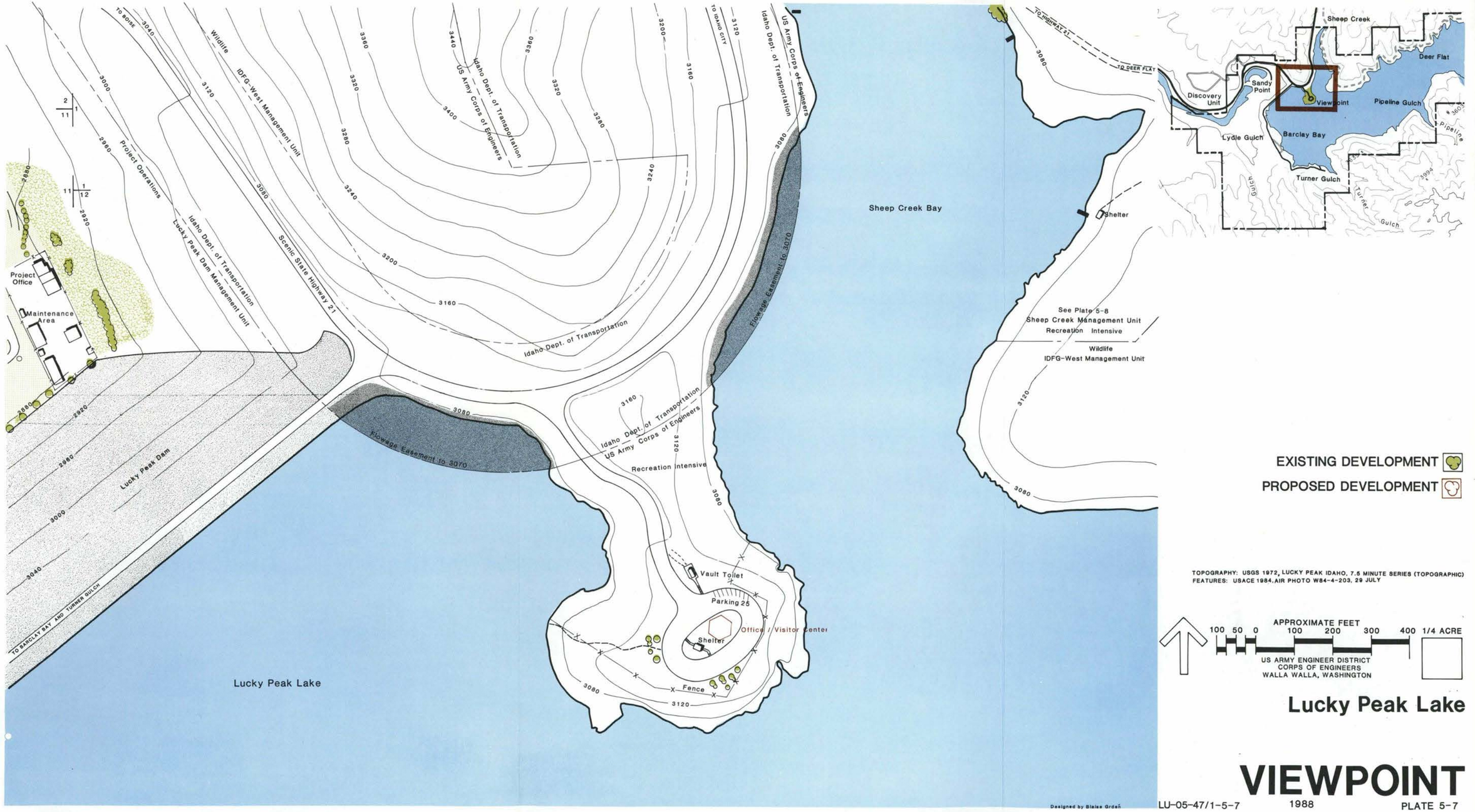
5. The cliffs of the management unit are an important consideration in designing and managing the facilities.

(6) Development and Management Concepts.

(a) Refer to Plate 5-7 for conceptual development plan for Lucky Peak Viewpoint.

(b) The interpretive facilities would be a joint venture of IDFG, IDPR, Idaho Department of Highways, and Idaho Department of Commerce. Federal participation would be from the Corps of Engineers, USBR, USFS, and USFWS. Other groups such as Boise Chamber of Commerce and the Keep Idaho Green Committee could also participate.

(c) Replace flat roof of vault toilet with an angular roof when roof needs to be repaired. (Refer to Section 6, paragraph 6.08.) Development of an office/visitor center will not take cost sharing. The interpretive facilities should be designed to prevent vandalism.


To Boise
Wildlife
IDFG-West Management Unit
Project Operations
Idaho Dept. of Transportation
Lucky Peak Dam Management Unit
Scenic State Highway 21
Project Office
Maintenance Area
Lucky Peak Dam
To Barclay Bay and Turner Gulch
Lucky Peak Lake
Idaho Dept. of Transportation
US Army Corps of Engineers
To Idaho City
Flowage Easement to 3070
Recreation Intensive
Vault Toilet
Parking 25
Shelter
Office / Visitor Center
Fence
Sheep Creek Bay
To Highway 21
To Deer Flat
Shelter
See Plate 5-8
Sheep Creek Management Unit
Recreation Intensive
Wildlife
IDFG-West Management Unit
Sheep Creek
Deer Flat
Discovery Unit
Sandy Point
Viewpoint
Pipeline Gulch
Lydle Gulch
Barclay Bay
Turner Gulch
Pipeline
Gulch
EXISTING DEVELOPMENT
PROPOSED DEVELOPMENT
TOPOGRAPHY: USGS 1972, LUCKY PEAK IDAHO, 7.5 MINUTE SERIES (TOPOGRAPHIC)
FEATURES: USACE 1984, AIR PHOTO W84-4-203, 29 JULY
APPROXIMATE FEET
100 50 0 100 200 300 400 1/4 ACRE
US ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WALLA WALLA, WASHINGTON
Lucky Peak Lake
VIEWPOINT
Designed by Blaise Grdeń
LU-05-47/1-5-7
1988
PLATE 5-7

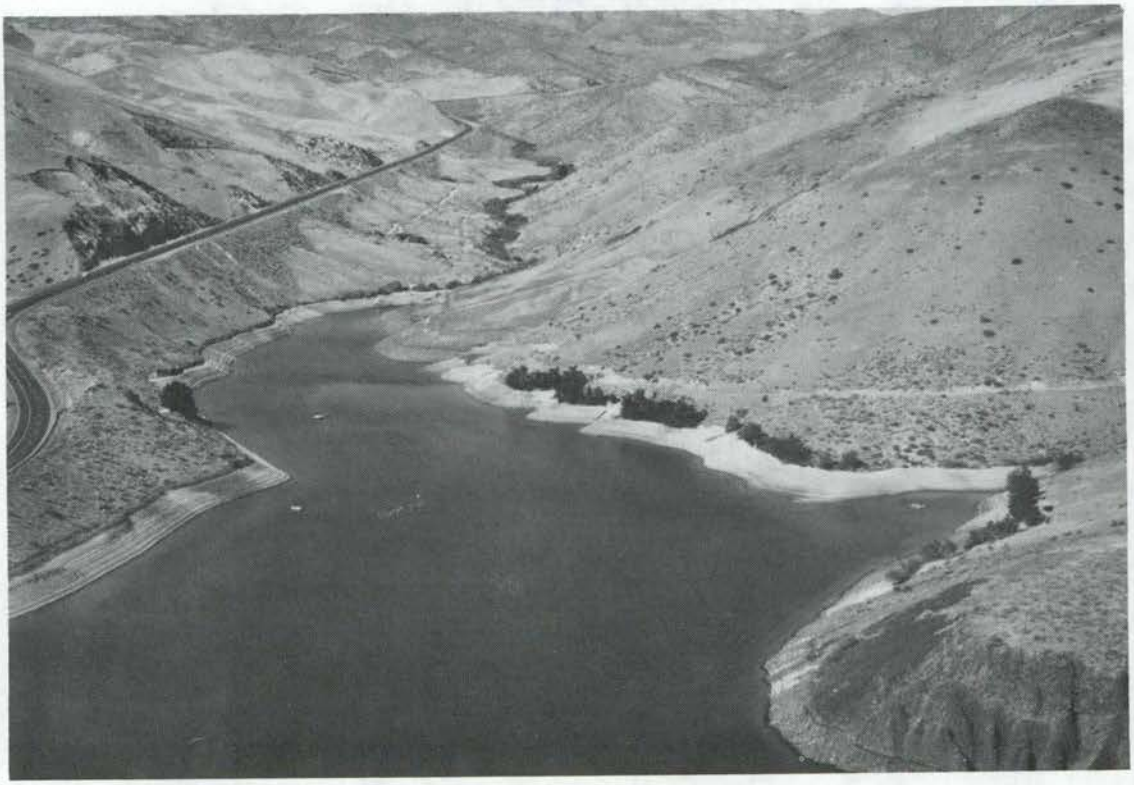


PHOTO 5-10. Sheep Creek Management Unit.

e. Sheep Creek Management Unit.

(1) Land Use Classification - Recreation Intensive.

(2) Acres - 29.9.

(3) Unit Description.

(a) Ecological Factors.

1. Landform - Steep slopes along Sheep Creek Arm except where Sheep Creek enters Lucky Peak Lake.

2. Orientation - Predominantly west.

3. Percent of Slope - 0-15 along mouth of Sheep Creek and 25 percent at the remaining areas.

4. Soils - Brent-Ladd loams, 15- to 30-percent slopes (20).

5. Vegetation - Douglas hawthorn, sandbar willow, antelope bitterbrush, golden currant, and Wood's rose.

6. Water Resources - Sheep Creek (perennial) and Lucky Peak Lake.

7. Wildlife Resources - Mule deer, golden and bald eagles, mallard, California quail, and songbirds.

(b) Cultural Factors.

1. Access - Boat access and firebreak road (via private road and State Highway 21).

2. Utilities - None.

3. Land Ownership/Management - USA/USACE and IDFG (see outgrants).

4. Outgrants - Part of unit is under IDFG, 83-10, Wildlife, License.

5. Adjacent Management Units - Lucky Peak Viewpoint and IDFG West.

6. Adjacent Ownership/Management - IDOT (inside project) and private (outside project).

7. Existing Developments - 4 sun shelters with picnic tables and 9 tie-up docks.

8. Visitor Use - Sightseeing, boating, picnicking, waterskiing, fishing, and swimming.

9. Archaeological-Historical Resources - Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

The old slide above Highway 21 is a negative visual impact.

(4) Influencing and Constraining Factors.

Steep topography severely limits development. Current access is via a private road. Close proximity of project boundary to the lake (70-80 feet) severely restricts development of day-use facilities. Purchase of private land or easements is difficult on existing projects under current policy. Due to the steep slopes near Highway 21, a new access road on IDOT lands will take special engineering requirements.

(5) Resource Objectives.

(a) Objectives.

1. CONTINUE AND EXPAND DAY-USE AREA PRIMARILY FOR BOATING AND PICNICKING.

2. Ensure safe vehicle access to Sheep Creek and Deer Flat (visitor access to Sheep Creek and service and emergency access to Deer Flat).

3. Develop a launching ramp, parking, and restroom.

4. Consider purchase of additional land to allow greater day-use facilities.

5. Revise the license with IDFG to eliminate from the license that portion within Sheep Creek Management Unit classified Recreation Intensive.

6. Improve habitat for cavity-nesting birds.

(b) Rationale.

1. Sheep Creek provides an area for picnicking and boating. It is also one of the few sites accessible by automobile and has the capacity to provide additional launching facilities and parking. This would help meet the regional recreation needs for boat ramps which are now deficient.

2. The road provides visitor access to Sheep Creek and emergency access to Deer Flat. Access to Sheep Creek is not guaranteed since the access road crosses private land.

3. Sheep Creek is one of the few areas on the lake where a new launching ramp could be located. However, if additional 70 minimum moorage sites and supporting parking at Spring Shores can be developed beyond the proposed 200 additional, it would be more economically feasible to do so in lieu of boat launching ramp and parking area at Sheep Creek. If alternative facilities are developed such as the additional boat moorage at Spring Shores, then Sheep Creek should be reclassified to Recreation Low Density until a high density of boating is designated on Lucky Peak Lake.

4. The project boundary is only 70-80 feet from the end of Sheep Creek Bay. Purchase of additional lands would allow for expanded day-use recreation facilities.

5. Lands under the IDFG license are classified Wildlife.

6. Suitable cavities for cavity-nesting birds are not available. The installation of nest boxes will increase the number of these birds available for viewing by recreationists.

(6) Development and Management Concepts.

(a) Refer to Plate 5-8 for conceptual development plan for Sheep Creek.

(b) Construct new access road on IDOT lands or purchase private land or easements to ensure vehicle access to Sheep Creek and Deer Flat. In the future, consideration should be given to acquire additional land for recreation facilities.

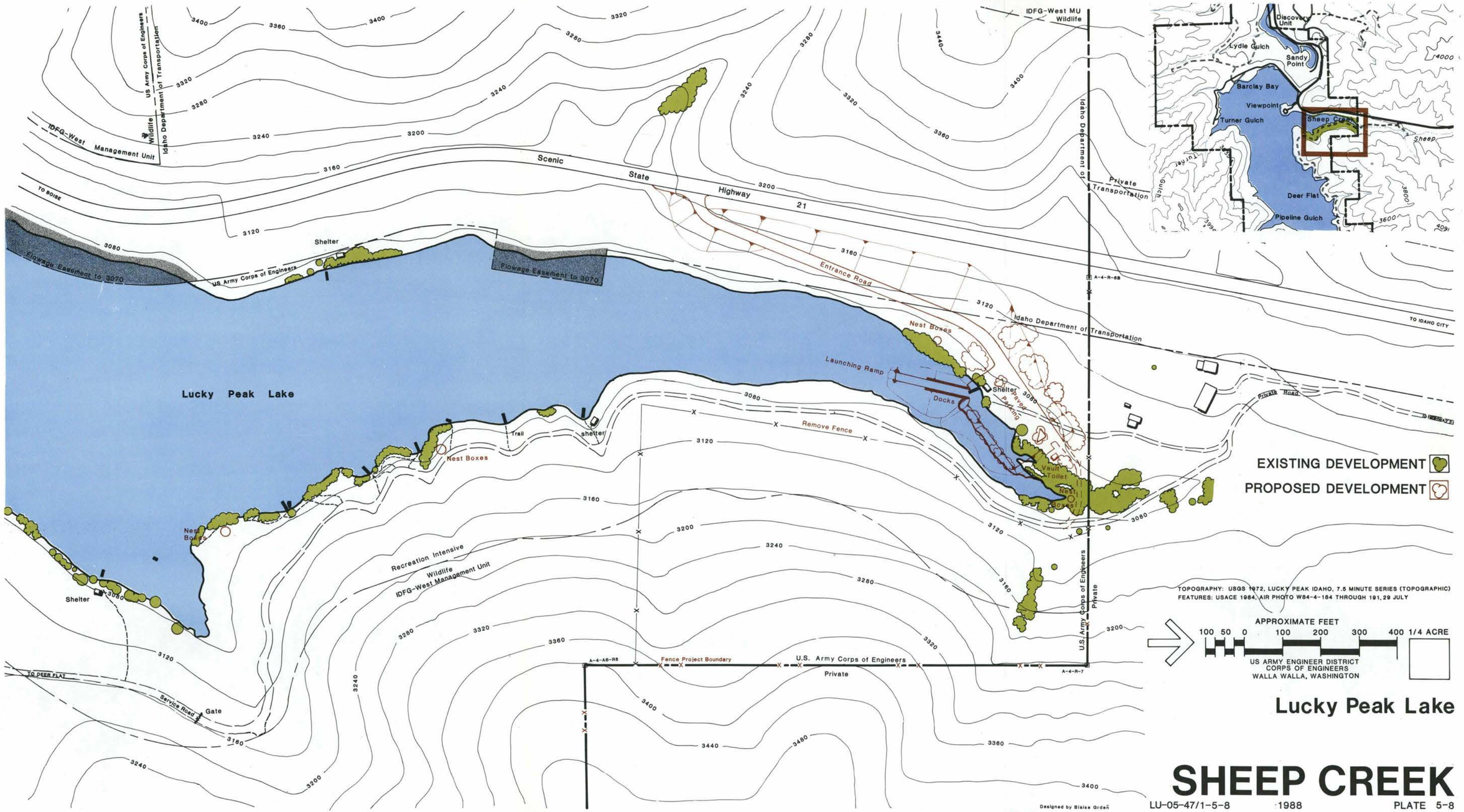
(c) Boat launching ramp.

(d) Auto trailer parking.

(e) Vault toilet.

(f) Develop portable water.

(g) Install nest boxes for cavity-nesting birds.



SHEEP CREEK

LU-05-47/1-5-8 1988 PLATE 5-8

Designed by Blaise Grden

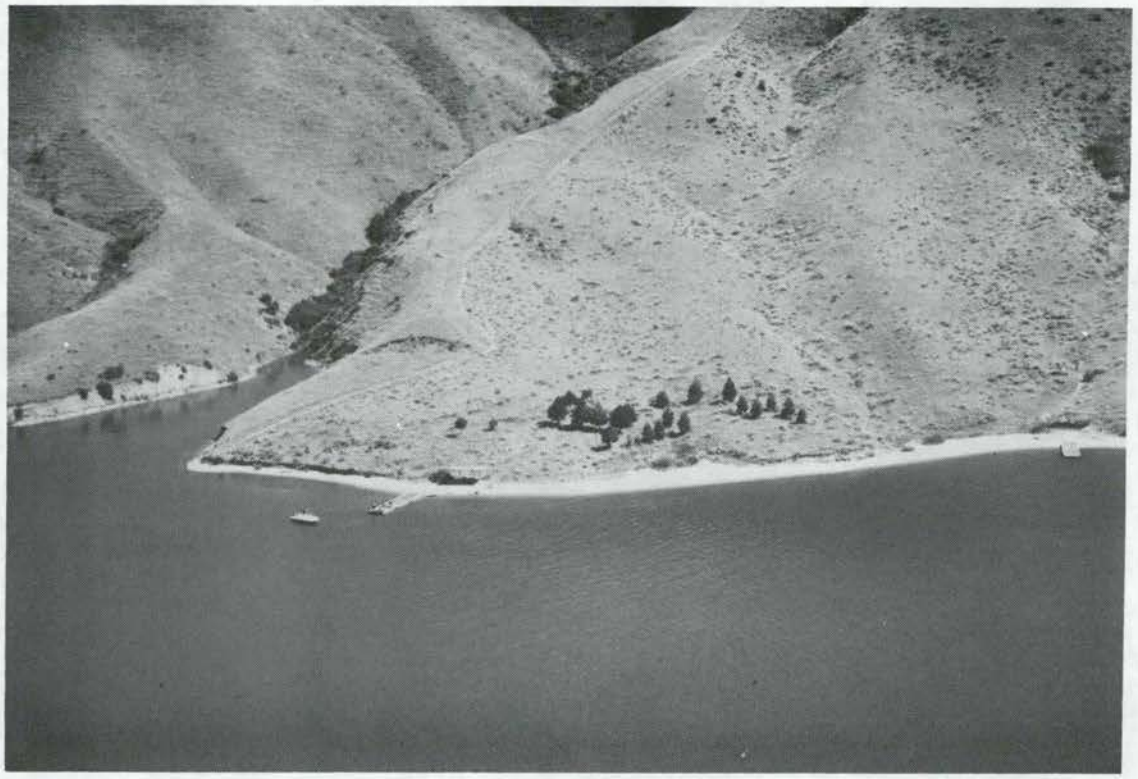


PHOTO 5-11. Pipeline Gulch Management Unit.

f. Pipeline Gulch Management Unit.

(1) Land Use Classification - Recreation Low Density.

(2) Acres - 55.2.

(3) Unit Description.

(a) Ecological Factors.

1. Landform - Very steep slopes.

2. Orientation - Northeast and northwest.

3. Percent of Slope - 25+ percent.

4. Soils - Ladd-Searles complex, 30- to 65-percent slopes (87) and Searles-Ladd complex, 30- to 65-percent slopes (169).

5. Vegetation - Ponderosa pine (irrigated), native grasses and forbs.

6. Water Resources - Pipeline Gulch (intermittent) and Lucky Peak Lake.

7. Wildlife Resources - Mule deer, coyote, golden and bald eagles, chukar, California quail, and songbirds.

(b) Cultural Factors.

1. Access - Boat access only.

2. Utilities - None.

3. Land Ownership/Management - USA/USACE and IDFG (see outgrants).

4. Outgrants - IDFG, 83-10, Wildlife, license expires 16 December 2007.

5. Adjacent Management Units - IDFG East.

6. Adjacent Ownership Outside Project - Private.

7. Existing Developments - 6 sun shelters with picnic tables, 6 tie-up docks, irrigation ditches, and tree plantings.

8. Visitor Use - Picnicking and boating.

9. Archaeological-Historical Resources - Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

Steep slopes, isolated site.

(4) Influencing and Constraining Factors.

Pipeline Gulch provides low-density recreation opportunities on the lake. However, the steep slopes in the area severely limit additional recreation development.

(5) Resource Objectives.

(a) Objectives.

1. CONTINUE TO PROVIDE LOW-DENSITY RECREATION WITH EMPHASIS ON DAY USE.

2. Revise the license with IDFG to eliminate the portion within Pipeline Gulch management unit from the license.

3. Provide additional cover for wildlife.

(b) Rationale.

1. Pipeline Gulch provides needed regional recreation.

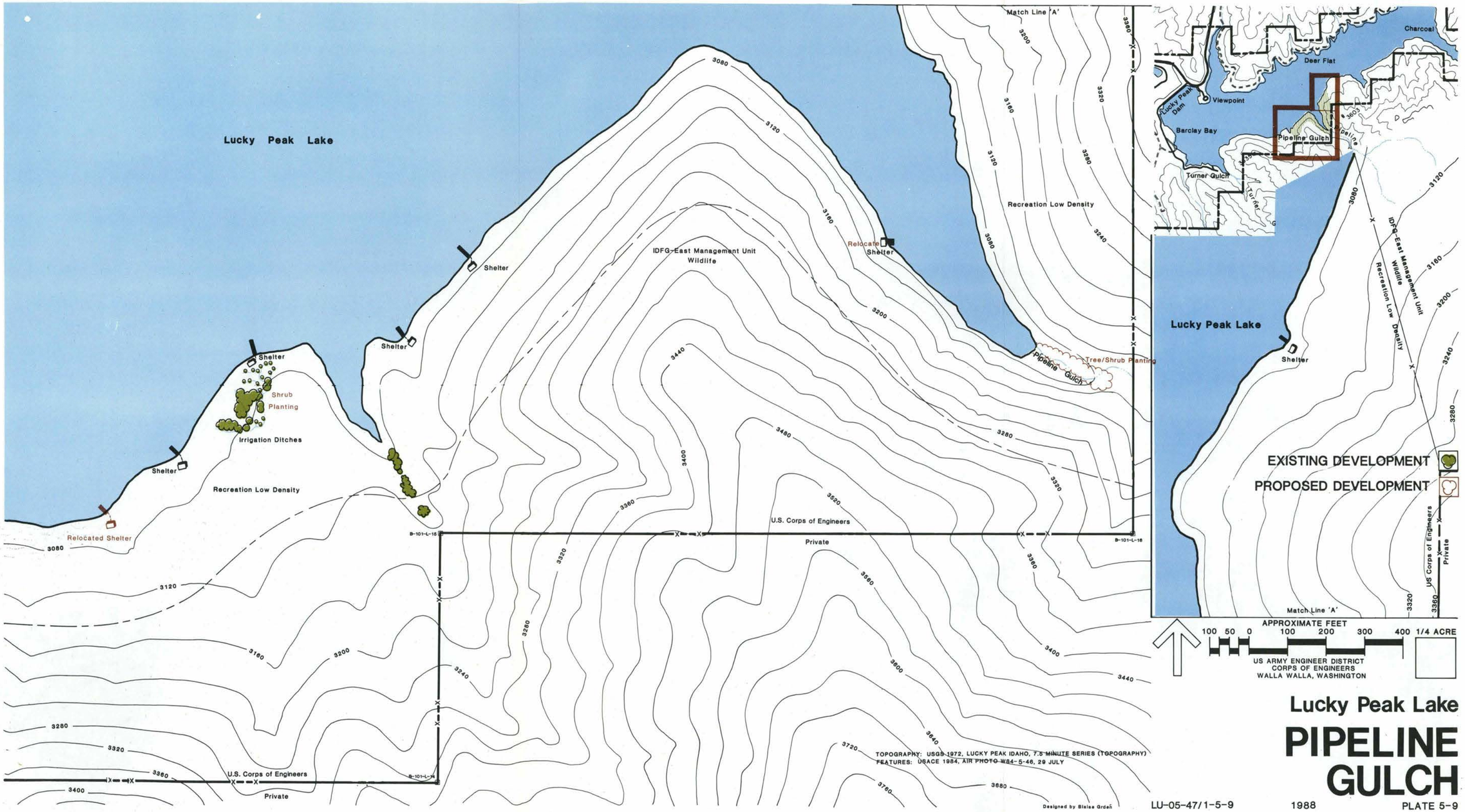
2. Lands under the IDFG license are classified Wildlife.

3. Additional trees and shrubs are needed to provide thermal cover for birds and mammals coming to the lake for water. Trees and shrubs will also provide feeding, roosting, and nesting cover for wildlife.

(6) Development and Management Concepts.

(a) Refer to Plate 5-9 for conceptual development plan for Pipeline Gulch.

(b) Establish a tree and shrub planting to provide cover for wildlife.



Lucky Peak Lake

PIPELINE GULCH

LU-05-47/1-5-9 1988 PLATE 5-9

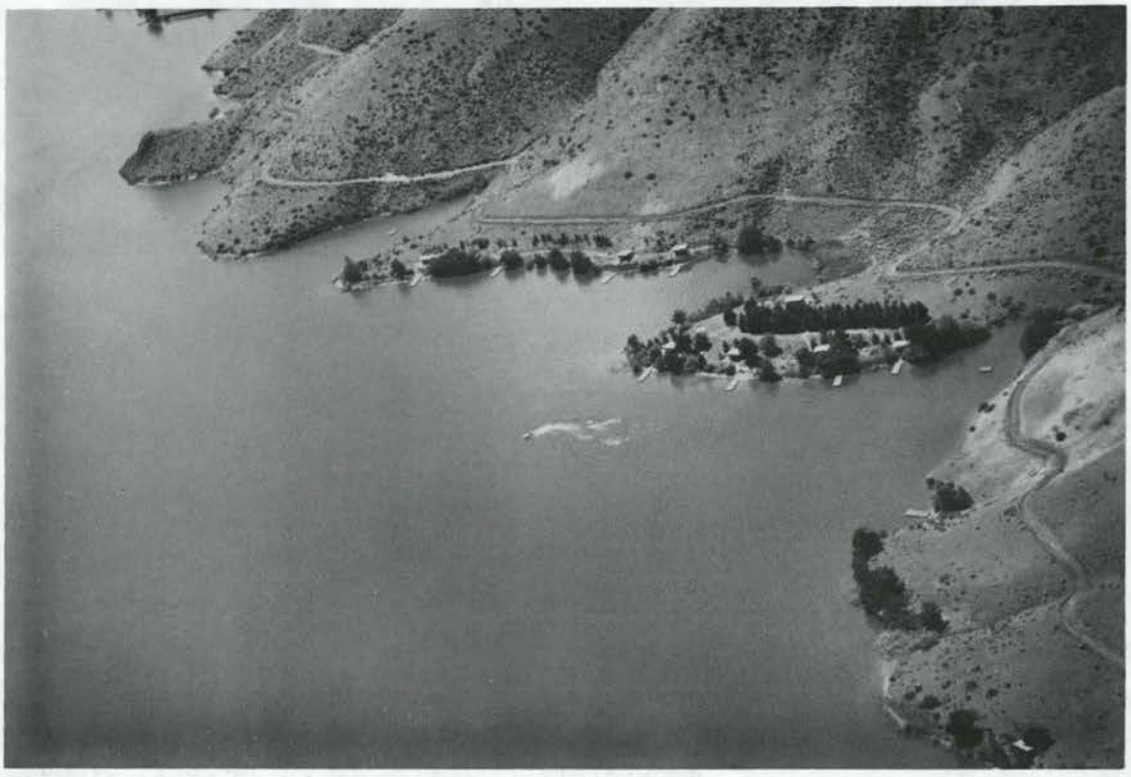


PHOTO 5-12. Deer Flat Management Unit.

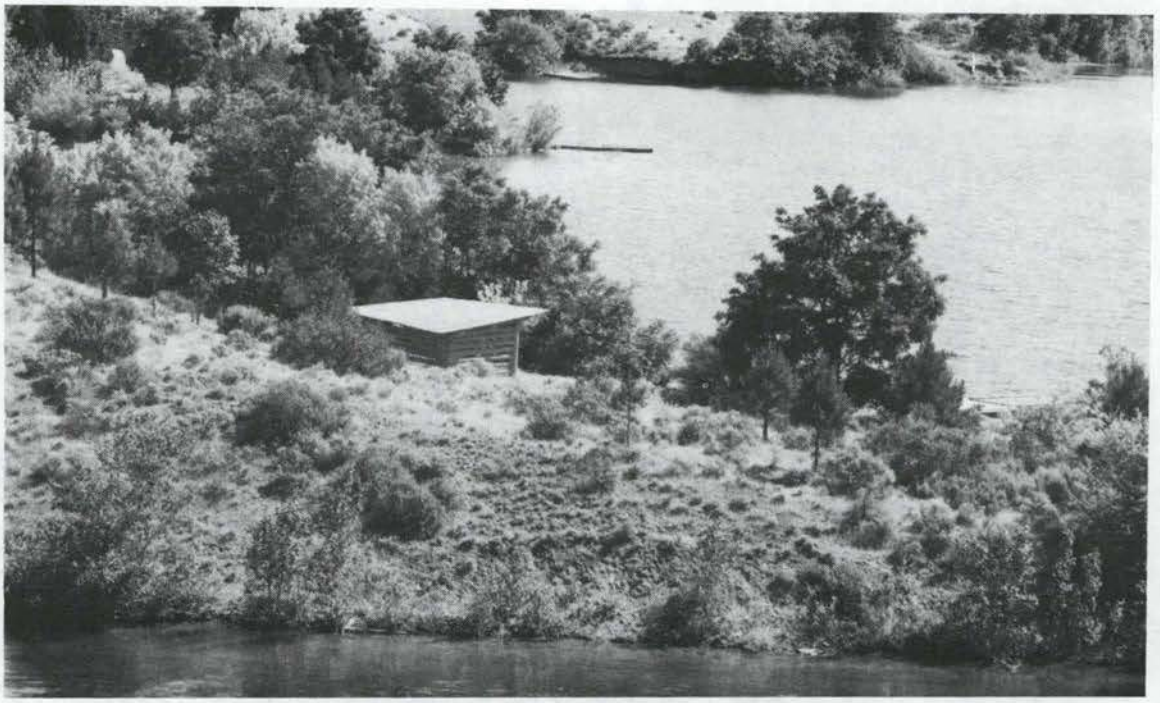


PHOTO 5-12.1. Log Shelter at Deer Flat.

g. Deer Flat Management Unit.

(1) Land Use Classification - Recreation Low Density.

(2) Acres - 77.9.

(3) Unit Description.

(a) Ecological Factors.

1. Landform - Steep slopes with small areas of moderately flat (15- to 25-percent) slopes.

2. Orientation - Southwest.

3. Percent of Slope - 25 percent.

4. Soils - Searles-Ladd complex, 30- to 65-percent slopes (169) and Brent loam, 12- to 30-percent slopes (17).

5. Vegetation - Ponderosa pine, green ash, blue spruce (irrigated), willows, antelope bitterbrush, and golden currant.

6. Water Resource - Lucky Peak Lake.

7. Wildlife Resources - Mule deer, porcupine, chukar, California quail, golden eagle, hawks, and songbirds.

(b) Cultural Factors.

1. Access - Boat and foot access, also access for service vehicles only.

2. Utilities - None.

3. Land Ownership/Management - USA/USACE.

4. Outgrants - None.

5. Adjacent Management Units - IDFG West.

6. Adjacent Ownership/Management Outside Project - USA/USBLM.

7. Existing Developments - 19 sun shelters with picnic tables, 20 tie-up docks, 7 ski docks, 2 (vault-type) restrooms, 19 picnic tables, irrigation ditches, 10 acres of shade trees, and firebreak road.

8. Visitor Use - Picnicking, boating, water skiing, and primitive camping.

9. Archaeological-Historical Resources - Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

Shade trees and excellent view of lake and surrounding mountains.

(4) Influencing and Constraining Factors.

(a) Deer Flat is located within the "island" (area between Highway 21 and the lake)--an important mule deer winter range. Development must be compatible with the deer habitat.

(b) Steep topography limits future development. The management unit is a boat access site with a firebreak service road used for access by project and IDFG personnel only. Also the road can be used as a trail for visitors.

(c) No electricity is available to provide security lighting.

(5) Resource Objectives.

(a) Objectives.

1. CONTINUE LOW-DENSITY BOAT ACCESS RECREATION OPPORTUNITIES WITH THE PRIMARY EMPHASIS ON DAY USE AND BOATING.

2. Improve habitat for cavity-nesting birds.

3. Provide additional cover for wildlife.

(b) Rationale.

1. Deer Flat is one of the largest low-density recreation, boat access sites on the lake. Deer Flat provides an excellent day-use area on the lake and serves to meet regional recreational needs as shown in TA - Volume 2.

2. Suitable cavities for cavity-nesting birds are not available. The installation of nest boxes will increase the number of these birds available for viewing by recreationists.

3. Additional trees and shrubs are needed to provide thermal cover for birds and mammals coming to the lake for water. Trees and shrubs will also provide feeding, roosting, and nesting cover for wildlife.

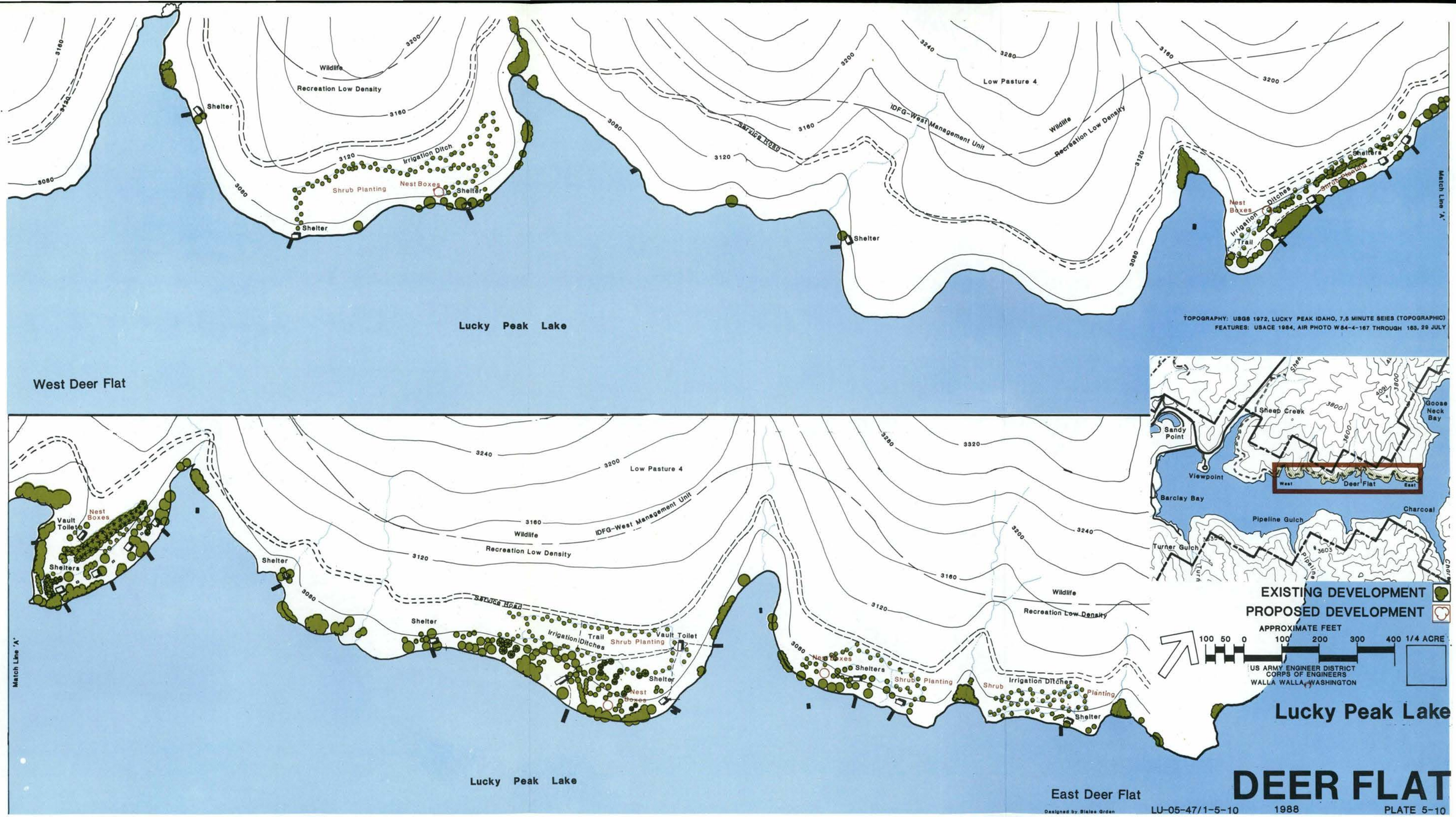
(6) Development and Management Concepts.

(a) Refer to Plate 5-10 for conceptual development plan for Deer Flat.

(b) Provide potable water.

(c) Install nest boxes for cavity-nesting birds.

(d) Establish a tree and shrub planting to provide cover for wildlife.


Wildlife
Recreation Low Density
Shelter
Irrigation Ditch
Shrub Planting
Nest Boxes
Shelter
Shelter
Lucky Peak Lake
West Deer Flat
Low Pasture 4
IDFG-West Management Unit
Wildlife
Recreation Low Density
Barclay Road
Shelter
Nest Boxes
Irrigation Ditches
Trail
Shelters
Shrub Planting
Match Line 'A'
TOPOGRAPHY: USGS 1972, LUCKY PEAK IDAHO, 7.5 MINUTE SEIES (TOPOGRAPHIC)
FEATURES: USACE 1984, AIR PHOTO W84-4-167 THROUGH 183, 29 JULY
Sheep Creek
Goose Neck Bay
Sandy Point
Viewpoint
Deer Flat
West
East
Barclay Bay
Pipeline Gulch
Charcoal
Turner Gulch
Vault Toilet
Nest Boxes
Shelters
Shelter
Low Pasture 4
IDFG-West Management Unit
Wildlife
Recreation Low Density
Barclay Road
Trail
Irrigation Ditches
Shrub Planting
Vault Toilet
Shelter
Nest Boxes
Shelters
Shrub Planting
Shrub Planting
Irrigation Ditches
Shelter
Match Line 'A'
Lucky Peak Lake
East Deer Flat
EXISTING DEVELOPMENT
PROPOSED DEVELOPMENT
APPROXIMATE FEET
100 50 0 100 200 300 400 1/4 ACRE
US ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WALLA WALLA, WASHINGTON
Lucky Peak Lake
DEER FLAT
Designed by Blaise Grden
LU-05-47/1-5-10
1988
PLATE 5-10

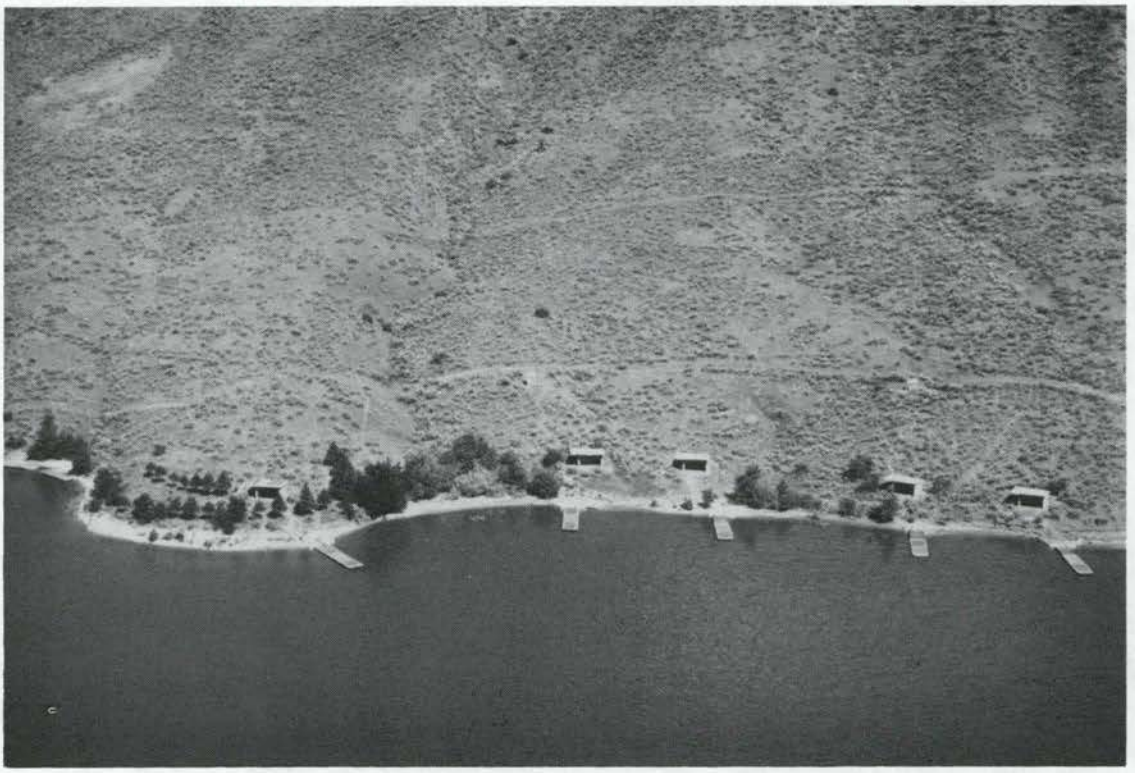


PHOTO 5-13. Charcoal Management Unit.

h. Charcoal Management Unit.

(1) Land Use Classification - Recreation Low Density.

(2) Acres - 128.0.

(3) Unit Description.

(a) Ecological Factors.

1. Landform - Most of the unit is very steep, except for the developed areas along the shoreline.

2. Orientation - Mainly west.

3. Percent of Slope - Developed area 15-25 percent; other areas 25+ percent.

4. Soils - Searles-Ladd complex, 30- to 65-percent slopes (169); Ladd-Searles complex, 30- to 65-percent slopes (87); Brent loam, 12- to 30-percent slopes (17); and rubble land (159).

PHOTO 5-14. Charcoal Creek.

7. Wildlife Resources - Mule deer, cottontail, coyote, chukar, golden and bald eagles, common merganser, and songbirds.

(b) Cultural Factors.

1. Access - Boat access only.

2. Utilities - None.

3. Land Ownership/Management - USA/USACE.

4. Outgrants - None.

5. Adjacent Management Units - Placer Point and IDFG East.

6. Adjacent Ownership/Management Outside Project - IDFG and USA/USBLM.

7. Existing Developments - 17 sun shelters with picnic tables, 16 tie-up docks, 3 ski docks, vault toilet, irrigation ditches, and 2 acres of tree plantings.

8. Visitor Use - Picnicking, boating, water skiing, primitive camping, and hiking.

9. Archaeological-Historical Resources - Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

Positive - The steep slopes along the mouth of Charcoal Creek, the riparian vegetation along Charcoal Creek, and shallow shore areas.

(4) Influencing and Constraining Factors.

Boat access site only. No utilities available.

(5) Resource Objectives.

(a) Objectives.

1. CONTINUE TO PROVIDE LOW-DENSITY RECREATION OPPORTUNITIES.

2. Protect wildlife habitat within the management unit.

3. Improve habitat for cavity-nesting birds.

4. Improve food source for young upland game birds.

(b) Rationale.

1. Charcoal provides excellent low-density boat access-only opportunities on the lake. The day-use opportunities help provide regional needs as shown in TA - Volume 2.

2. The southeast corner of the unit contains existing vegetation with inherent wildlife value and should not be disturbed.

3. Suitable cavities for cavity-nesting birds are not available. The installation of nest boxes will increase the number of these birds available for viewing by recreationists.

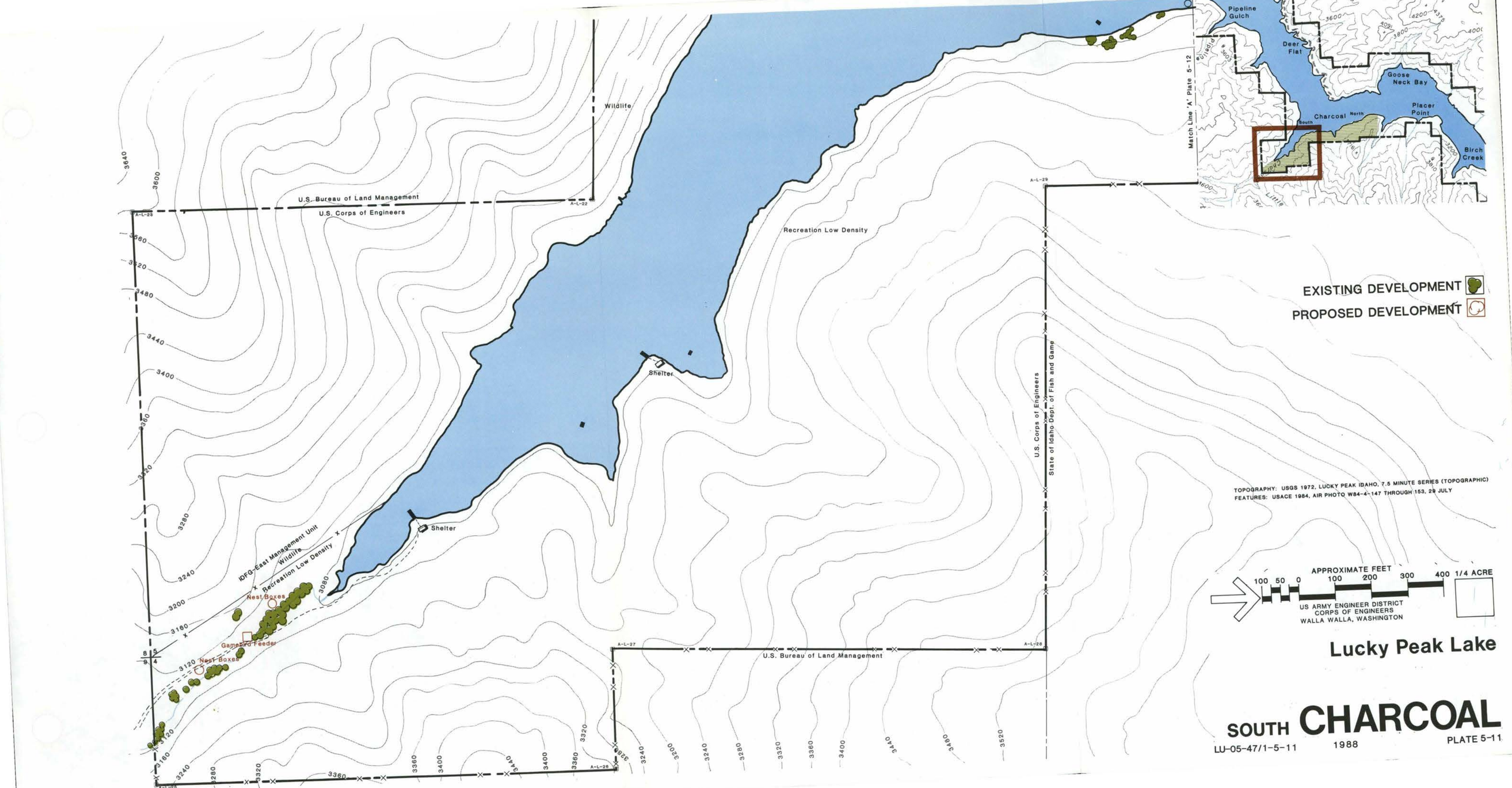
4. Steep topography precludes the establishment of food plots to provide food for young upland game birds and other wildlife. Game-bird feeders are an alternate way to provide food for and to attract wildlife which can be enjoyed by recreationists.

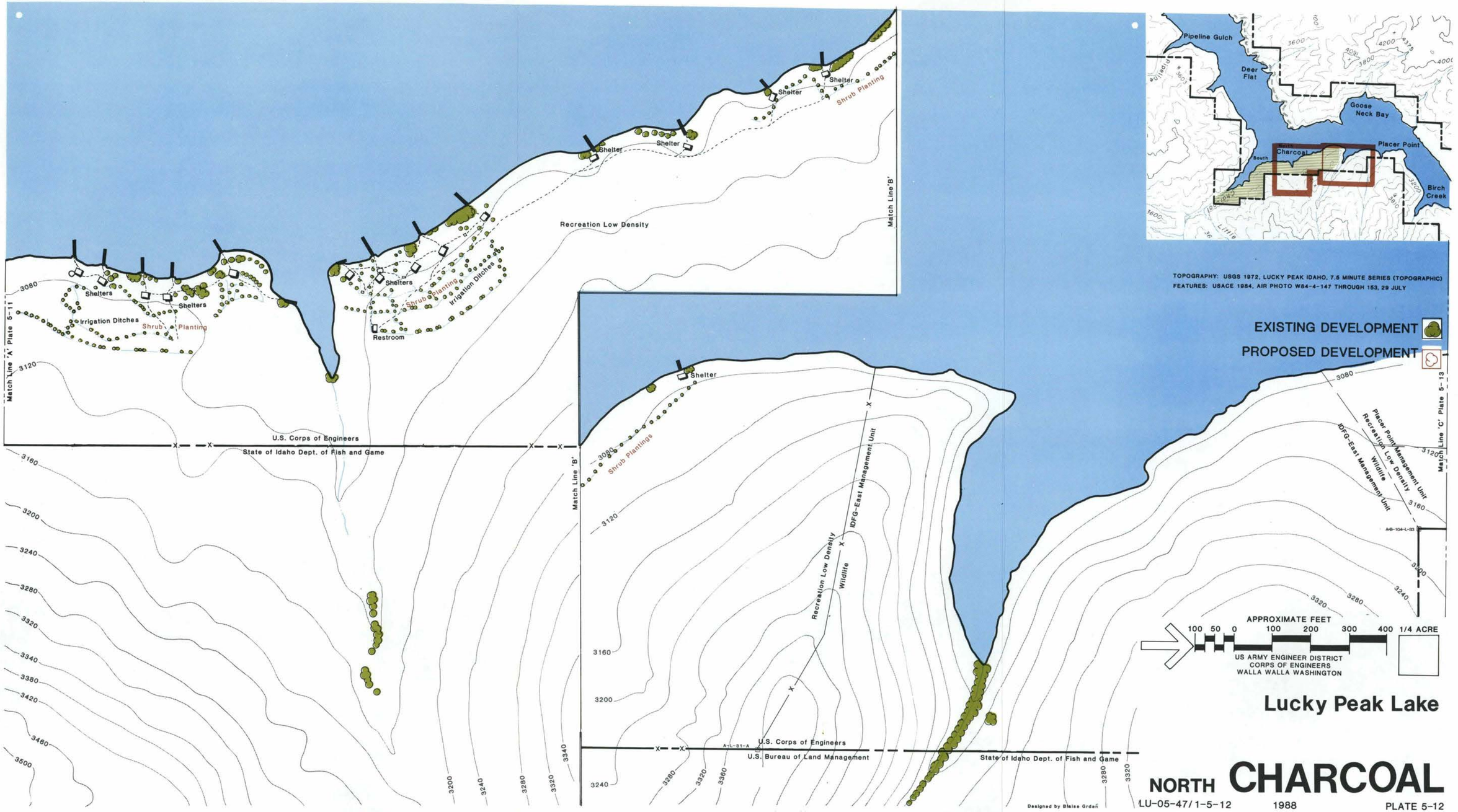
(6) Development and Management Concepts.

(a) Refer to Plates 5-11 and 5-12 for conceptual development plan for Charcoal.

(b) Install nest boxes for cavity-nesting birds.

(c) Install game-bird feeders.


Pipeline Gulch
Deer Flat
Goose Neck Bay
Placer Point
Charcoal North
South
Birch Creek
Match Line 'A' Plate 5-12
Wildlife
U.S. Bureau of Land Management
U.S. Corps of Engineers
Recreation Low Density
Shelter
Shelter
IDFG-East Management Unit
Wildlife
Recreation Low Density
Nest Boxes
Gamebird Feeder
Nest Boxes
U.S. Corps of Engineers
State of Idaho Dept. of Fish and Game
U.S. Bureau of Land Management
EXISTING DEVELOPMENT
PROPOSED DEVELOPMENT
TOPOGRAPHY: USGS 1972, LUCKY PEAK IDAHO, 7.5 MINUTE SERIES (TOPOGRAPHIC)
FEATURES: USACE 1984, AIR PHOTO W84-4-147 THROUGH 153, 29 JULY
APPROXIMATE FEET
100 50 0 100 200 300 400
1/4 ACRE
US ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WALLA WALLA, WASHINGTON
Lucky Peak Lake
SOUTH CHARCOAL
LU-05-47/1-5-11
1988
PLATE 5-11


Pipeline Gulch
Deer Flat
Goose Neck Bay
Placer Point
North Charcoal
South
Birch Creek
Little
TOPOGRAPHY: USGS 1972, LUCKY PEAK IDAHO, 7.5 MINUTE SERIES (TOPOGRAPHIC)
FEATURES: USACE 1984, AIR PHOTO W84-4-147 THROUGH 153, 29 JULY
EXISTING DEVELOPMENT
PROPOSED DEVELOPMENT
Match Line 'A' Plate 5-11
Match Line 'B'
Match Line 'B'
Match Line 'C' Plate 5-13
Recreation Low Density
Shelters
Shelter
Restroom
Irrigation Ditches
Shrub Planting
Shrub Plantings
U.S. Corps of Engineers
State of Idaho Dept. of Fish and Game
U.S. Bureau of Land Management
A-VL-31-A
A-B-104-L-33
IDFG-East Management Unit
Recreation Low Density
Wildlife
Placer Point Management Unit
Recreation Low Density
Wildlife
3080
3120
3160
3200
3240
3280
3320
3340
3360
3380
3420
3460
3500
APPROXIMATE FEET
100 50 0 100 200 300 400 1/4 ACRE
US ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WALLA WALLA WASHINGTON
Lucky Peak Lake
NORTH CHARCOAL
LU-05-47/1-5-12
1988
PLATE 5-12
Designed by Blaise Grden

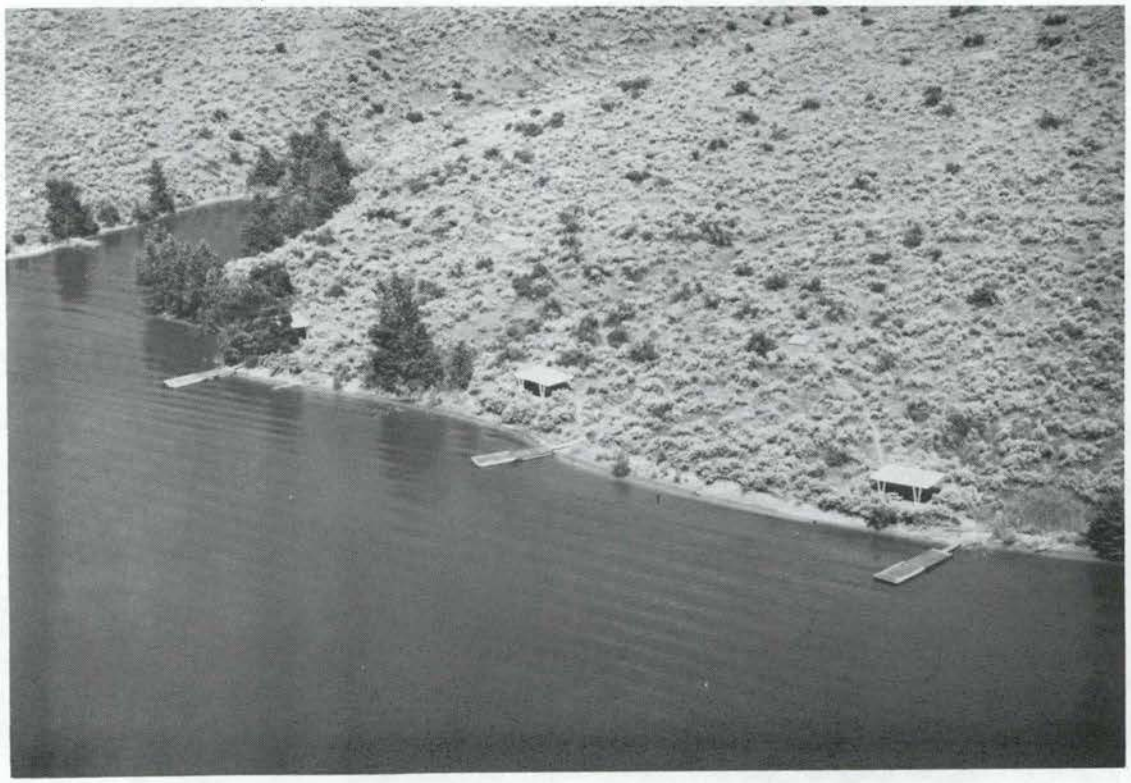


PHOTO 5-15. Placer Point Management Unit.

i. Placer Point Management Unit.

(1) Land Use Classification - Recreation Low Density.

(2) Acres - 29.8.

(3) Unit Description.

(a) Ecological Factors.

1. Landform - The area along the shoreline is moderately flat, with the landform becoming steeper towards the project boundary.

2. Orientation - West.

3. Percent of Slope - 15-20 percent.

4. Soils - Searles-Ladd complex, 30- to 60-percent slopes (169); Ladd-Searles complex, 30- to 65-percent slopes (87); Brent loam, 12- to 30-percent slopes (17).

5. Vegetation - Ponderosa pine (irrigated), Lombardy poplar, and black alder.

6. Water Resources - Lucky Peak Lake and unnamed intermittent stream.

7. Wildlife Resources - Mule deer, cottontail, coyote, golden and bald eagles, California quail, and common merganser.

(b) Cultural Factors.

1. Access - Boat access only.

2. Utilities - None.

3. Land Ownership/Management - USA/USACE.

4. Outgrants - None.

5. Adjacent Management Units - Charcoal and Birch Creeks.

6. Adjacent Ownership/Management Outside Project - IDFG.

7. Existing Developments - 8 sun shelters with picnic tables, 7 tie-up docks, 3 vault restrooms, irrigation ditches, and 2 acres of irrigated trees and shrubs.

8. Visitor Use - Picnicking, boating, water skiing, and hiking.

9. Archaeological-Historical Resources - Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

Excellent view of lake and surrounding mountains.

(4) Influencing and Constraining Factors.

Boat access site only. Limited area for expansion. No utilities available.

(5) Resource Objectives.

(a) Objective.

1. CONTINUE LOW-DENSITY RECREATION WITH THE EMPHASIS ON DAY USE AND BOATING.

2. Provide additional cover for wildlife.

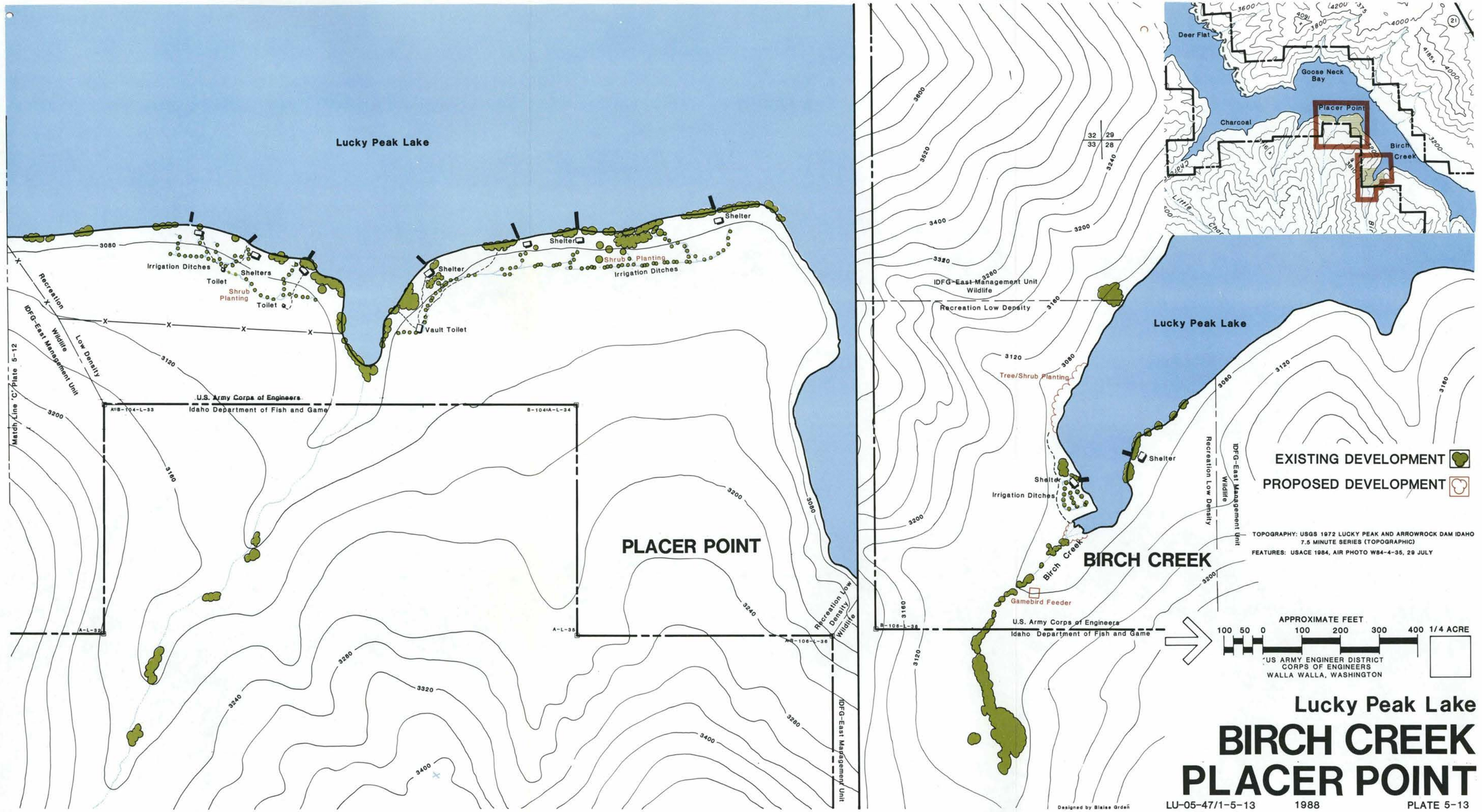
(b) Rationale.

1. Placer Point helps provide low-density recreation opportunities. The need for these facilities in the Lucky Peak PSMA will continue in the year 2000.

2. Additional shrubs are needed to provide hiding, thermal, feeding, roosting, and nesting cover for birds and mammals. Shrub planting will attract wildlife which can be viewed by recreationists.

(6) Development and Management Concepts.

Refer to Plate 5-13 for conceptual development plan for Placer Point.



Designed by Blaise Grden

Lucky Peak Lake

BIRCH CREEK
PLACER POINT

LU-05-47/1-5-13 1988 PLATE 5-13

PHOTO 5-16. Birch Creek Management Unit.

j. Birch Creek Management Unit.

(1) Land Use Classification - Recreation Low Density.

(2) Acres - 18.9.

(3) Unit Description.

(a) Ecological Factors.

1. Landform - Steep slopes at the mouth of Birch Creek.

2. Orientation - Northeast and southwest.

3. Percent of Slope - 15+ percent.

4. Soils - Ladd-Searles complex, 30- to 60-percent slopes (87); Searles-Ladd complex, 30- to 65-percent slopes (169); Tindahay fine sandy loam, 2- to 4-percent slopes (179).

5. Vegetation - Rocky Mountain maple, water birch, red-osier dogwood, Douglas hawthorn, Saskatoon service berry, bittercherry, common chokecherry, antelope bitterbrush, golden currant, and Wood's rose.

6. Water Resources - Birch Creek (intermittent) and Lucky Peak Lake.

7. Wildlife Resources - Golden and bald eagles, mule deer, coyote, songbirds, and chukar.

(b) Cultural Factors.

1. Access - Boat access only.

2. Utilities - None.

3. Land Ownership/Management - USA/USACE.

4. Outgrants - IDFG, 83-10, Wildlife, license expires 17 December 2007.

5. Adjacent Management Units - IDFG East.

6. Adjacent Ownership Outside Project - IDFG.

7. Existing Developments - 2 sun shelters, 2 tie-up docks, irrigation ditches, and tree plantings.

8. Visitor Use - Hiking, picnicking, and boating.

9. Archaeological-Historical Resources - Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

Positive - Riparian vegetation and steep slopes.

(4) Influencing and Constraining Factors.

Steep topography, water access only, and no utilities available.

(5) Resource Objectives.

(a) Objectives.

1. MAINTAIN BIRCH CREEK AS LOW-DENSITY RECREATION.

2. Provide improved hiking trail in cooperation with IDFG.

3. Remove Birch Creek Management Unit from IDFG license because it is classified Recreation Low Density.

4. Improve food source for young upland game birds.

5. Provide additional cover for wildlife.

(b) Rationale.

1. Birch Creek offers one of the few hiking opportunities on the project. This and the sun shelters help meet the regional needs for recreation.

2. Birch Creek is the only area with low topography along the creek which could provide formal hiking opportunities. IDFG owns lands adjacent to the project and could cooperate in providing the trail.

3. Lands under the IDFG license are classified "Wildlife."

4. Lack of suitable topography precludes the establishment of food plots to provide food for young upland game birds and other wildlife. Game-bird feeders are an alternate way to provide food for and to attract wildlife which can be enjoyed by recreationists.

5. Additional trees and shrubs are needed to provide hiding, thermal, feeding, roosting, and nesting cover for birds and mammals. Tree and shrub plantings will attract wildlife which can be viewed by recreationists.

(6) Development and Management Concepts.

(a) Refer to Plate 5-13 for conceptual development plan for Birch Creek.

(b) Install upland game-bird feeder.

(c) Establish tree and shrub planting to provide cover for wildlife.

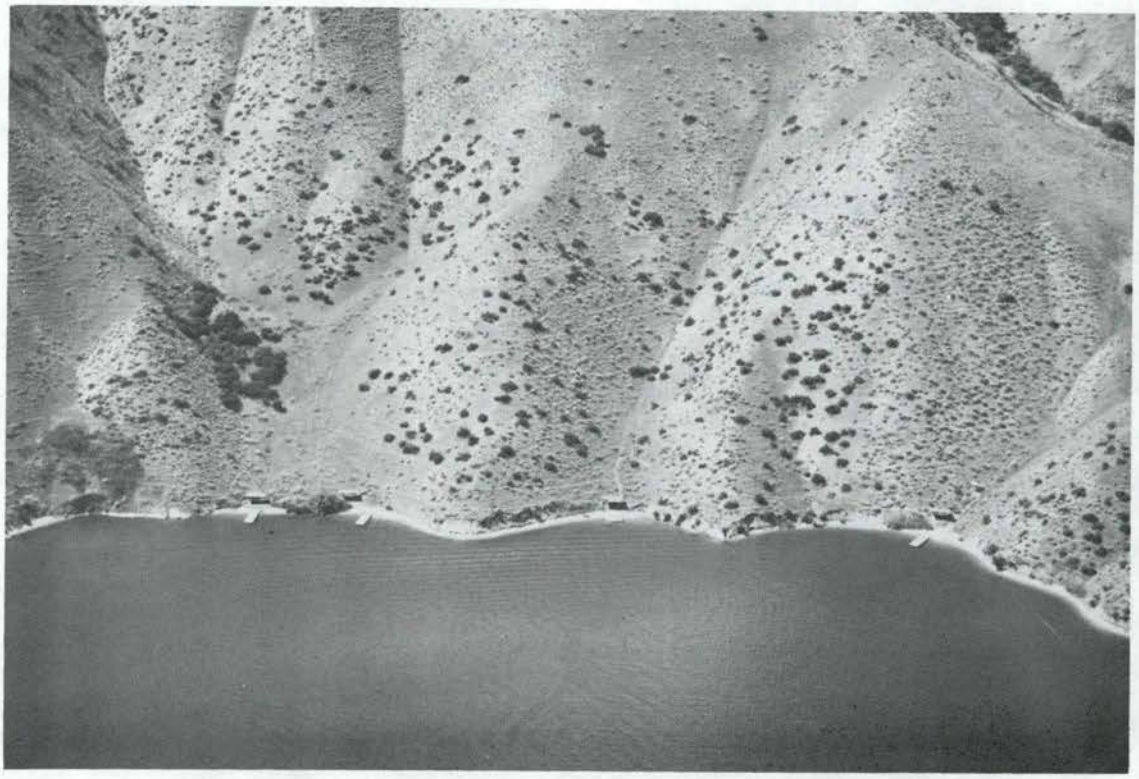


PHOTO 5-17. Goose Neck Bay - Northern Section.

k. Goose Neck Bay Management Unit.

(1) Land Use Classification - Recreation Low Density.

(2) Acres - 36.6.

(3) Unit Description.

(a) Ecological Factors.

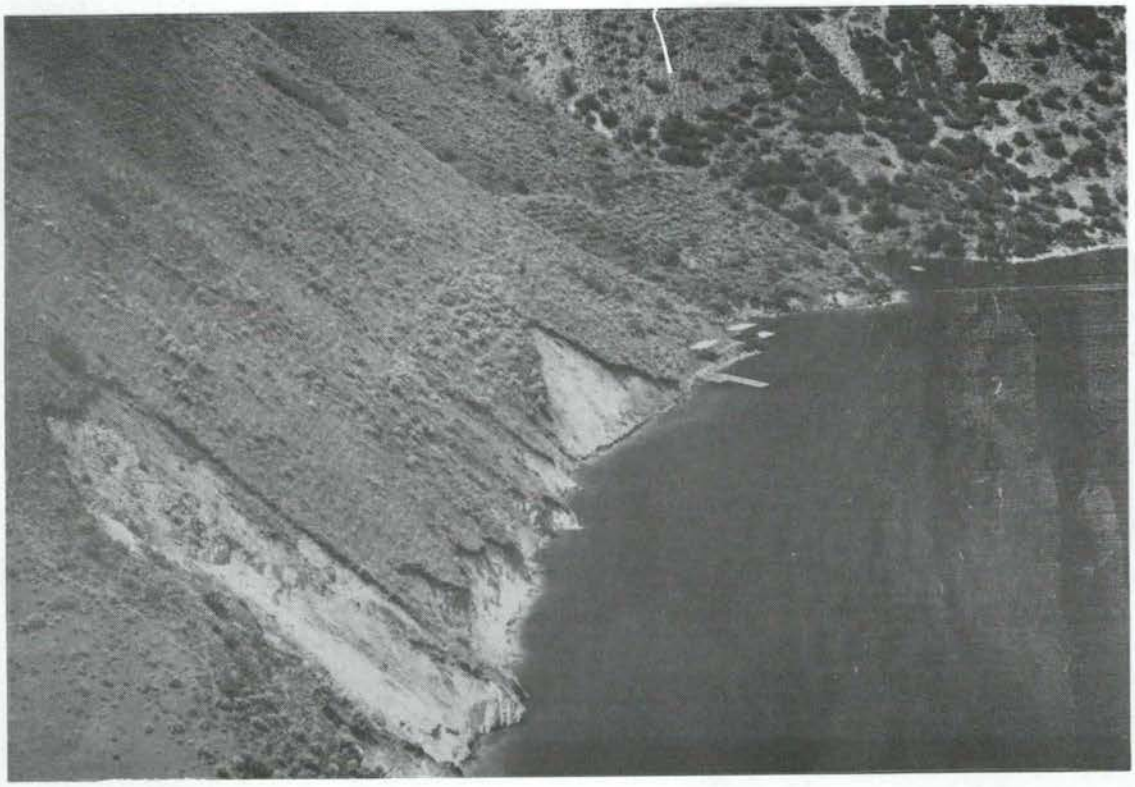
1. Landform - Very steep slopes, east facing.

2. Orientation - South and southwest.

3. Percent of Slope - 25+ percent.

4. Soils - Searles-Ladd complex, 30- to 60-percent slopes (169) and Searles-rock outcrop complex, 30- to 80-percent slopes (171).

5. Vegetation - Bitterbrush and native grasses and forbs.



5-17.1. Goose Neck Bay - Southern Section.

6. Water Resource - Lucky Peak Lake.

7. Wildlife Resources - Mule deer, chukar, songbirds, and golden and bald eagles.

(b) Cultural Factors.

1. Access - Boat access only.

2. Utilities - None.

3. Land Ownership/Management - USA/USACE and IDFG (see outgrants).

4. Outgrants - IDFG, 83-10, Wildlife, license expires 17 December 2007.

5. Adjacent Management Units - IDFG West.

6. Adjacent Ownership/Management Outside Project - IDFG and USA/USBLM.

7. Existing Developments - 7 sun shelters, 7 tie-up docks, ski dock, irrigation ditches, tree plantings, and bitterbrush plantings.

8. Visitor Use - Picnicking, boating, and water skiing.

9. Archaeological-Historical Resources - Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

Steep slopes and isolated location.

(4) Influencing and Constraining Factors.

Extremely steep slopes prevent any additional development. Boat access only. No utilities available.

(5) Resource Objectives.

(a) Objective.

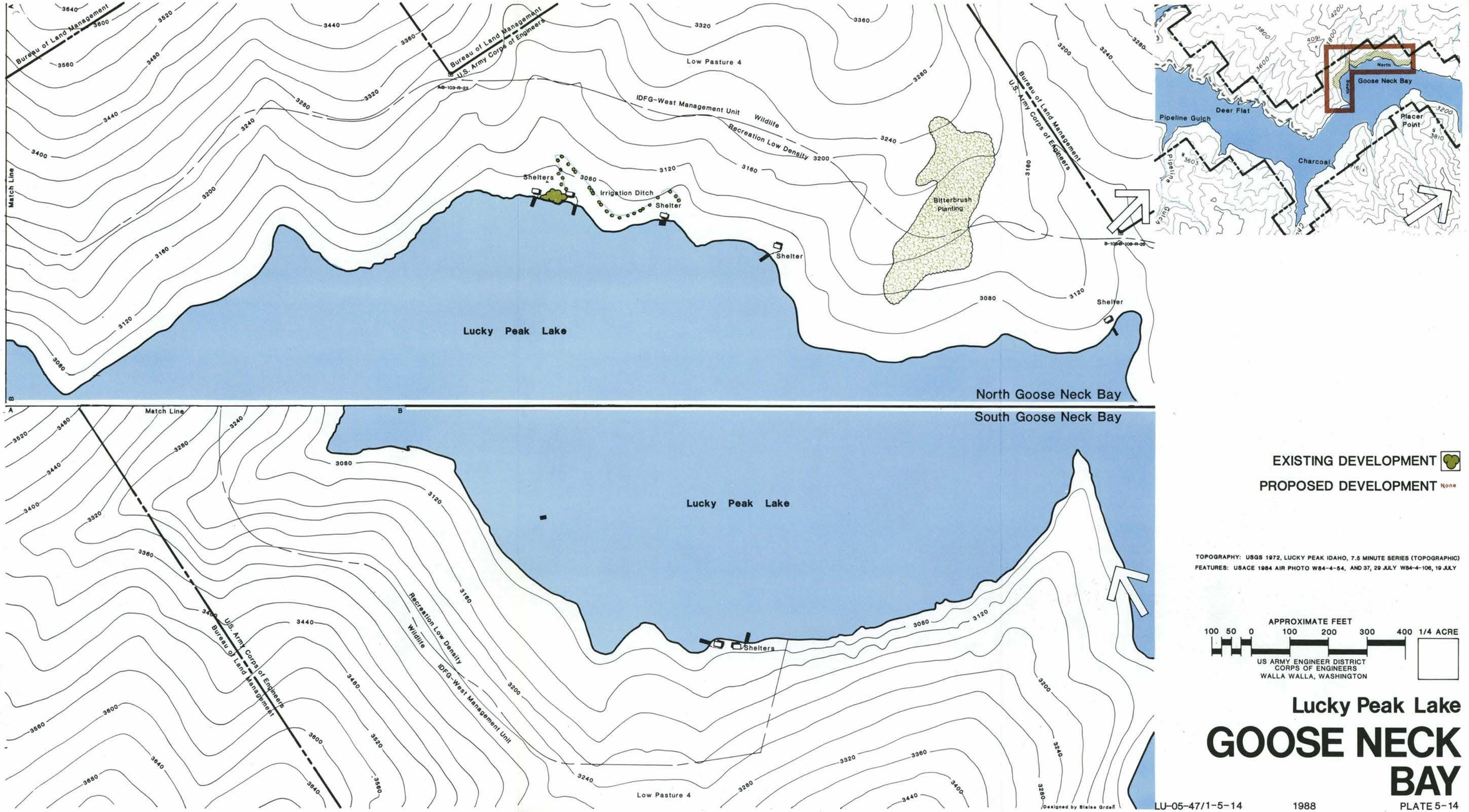
CONTINUE LOW-DENSITY RECREATION WITH EMPHASIS ON DAY USE AND BOATING.

(b) Rationale.

The sun shelters at Goose Neck Bay help meet the regional needs for day use within the Lucky Peak PSMA.

(6) Development and Management Concepts.

Refer to Plate 5-14 for conceptual development plan for Goose Neck Bay.



Lucky Peak Lake

GOOSE NECK BAY

LU-05-47/1-5-14 1988 PLATE 5-14

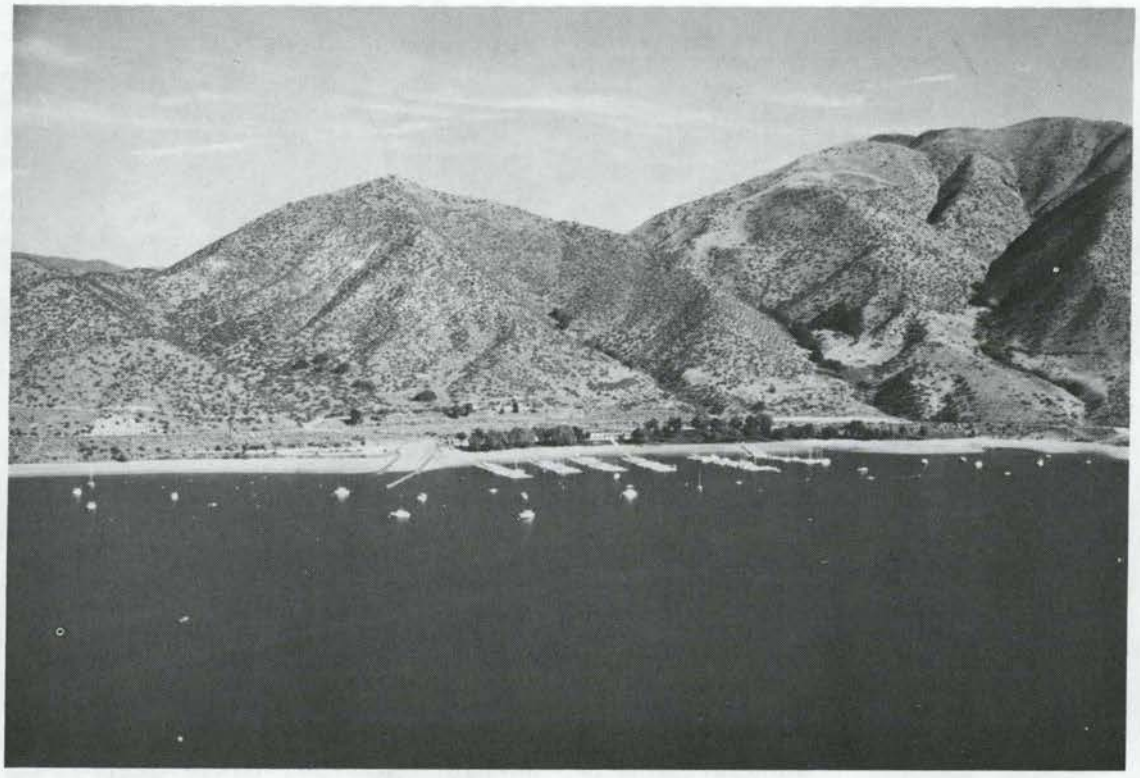


PHOTO 5-18. Spring Shores Management Unit.

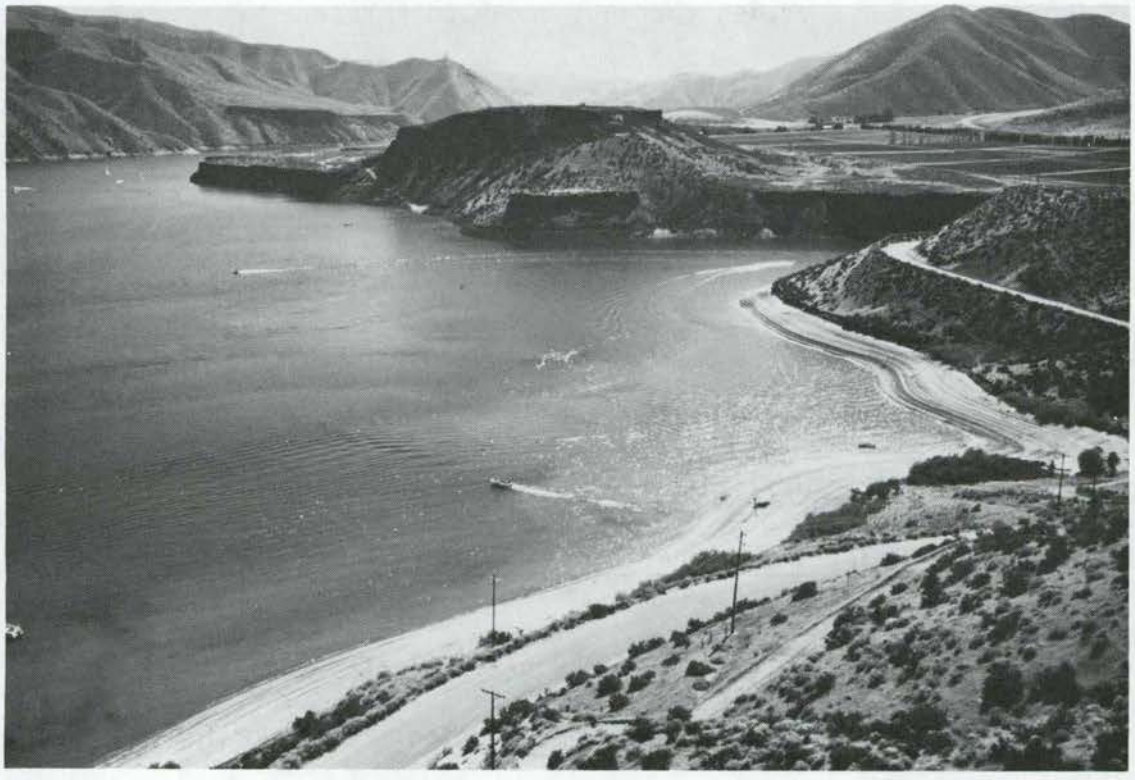


PHOTO 5-19. Spring Shores Management Unit.

1. Spring Shores Unit, LPSP Management Unit.

(1) Land Use Classification - Recreation Intensive.

(2) Acres - 68.3.

(3) Unit Description.

(a) Ecological Factors.

1. Landform - Gentle slope between shore and county road. Steep slopes between county road and project boundary.

2. Orientation - South.

3. Percent of Slope - Developed area 15-25 percent; other areas 25+ percent.

4. Soils - Unsurveyed.

5. Vegetation - Black locust, weeping willow, sandbar willow, whiplash willow, bittercherry, common chokecherry, antelope bitterbrush, golden currant, and Wood's rose.

6. Water Resource - Lucky Peak Lake.

7. Wildlife Resources - Golden and bald eagles, mule deer, chukar, California quail, songbirds, and coyote.

(b) Cultural Factors.

1. Access - State Highway 21 and Arrowrock Road (paved and gravel) in Boise and Ada Counties.

2. Utilities - Electricity and telephone.

3. Land Ownership/Management - USA/USACE and IDPR (outgrants).

4. Outgrants - IDPR 67-41, lease, expires 7 May 2002.

5. Adjacent Management Units - IDFG North.

6. Adjacent Ownership/Management Outside Project - IDFG and IDOL.

7. Existing Developments - Marina (300-slip marina concession building with food and beverage service and marine maintenance and supplies including gas), two boat launching ramps with

low elevations at 2950 at No. 1 and 3050 at No. 2 (2 lanes each), handling docks, swimming area, lawn with shade trees, picnic tables and grills, parking for 257 autos and 76 vehicles with trailers, electric hookup for 10 RV's, restroom/change house, two restrooms with septic tanks and tile disposal system, well and drinking water, irrigation system, 2 tie-up docks, 3 ski docks, and bitterbrush plantings.

8. Visitor Use - Boating, boat launching, swimming sunbathing, fishing, and camping.

9. Archaeological-Historical Resources - Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

Excellent view of lake and Chimney Rock. Old growth shade trees.

(4) Influencing and Constraining Factors.

(a) Spring Shores is under lease to IDPR and has good access via paved county road. There are limited areas for parking. Current facilities are old and need to be renovated to maintain a safe visitor environment. Demand for parking exceeds current available parking. The majority of visitor parking is located above Arrowrock County Road. This requires pedestrians to cross the road, creating a severe safety hazard. This problem will increase during construction of the powerhouse at Arrowrock Dam.

(b) The area for development is extremely limited due to steep topography and the close proximity of the Arrowrock Road to the shoreline. With the emphasis on marina facilities, the swimming beach will most likely need to be removed in the future to accommodate additional slips. Much of the swimming use at the unit is closely associated with marina activities, which means there will not be a direct effect on Robie Creek or Sandy Point; however, some additional pressure will occur at these sites. Robie Creek has a parking shortage and could not accommodate additional parking. Sandy Point parking facilities are not at capacity but will be as the Boise metro area continues to expand.

(5) Resource Objectives.

(a) Objectives.

1. CONTINUE TO PROVIDE INTENSIVE RECREATION USE WITH THE PRIMARY EMPHASIS ON MARINA AND BOAT LAUNCHING.

2. Expand parking and upgrade all facilities to provide a quality recreation experience for all visitors.

3. Provide visitor safety (relocation of county road, parking, night lighting, and underground utility lines).

(b) Rationale.

1. Spring Shores is the only location on the lake which is suitable for a marina. Suitable areas for parking are extremely limited within the project. Marina facilities require less parking facilities than boat ramps since only auto parking is needed versus auto-trailer parking. With the available sites for boat ramps limited, it is important that a marina facility be maintained and improved. Additional slips at the marina will help meet regional goals for boating. The current marina is used to capacity with demand for more slips.

2. Facilities at Spring Shores need to be upgraded and replaced. Specific items in poor condition are moorage docks, irrigation system, restrooms, well, and path system. Additionally, severe erosion problems are occurring at the shoreline.

3. Relocation of county road around the parking area will provide much needed safety at Spring Shores. At present, recreational vehicles and pedestrians must cross the county road from the parking areas above the county road. Night lighting and removal of overhead utility lines will allow safer loading and unloading at the launching ramps.

(6) Development and Management Concepts.

(a) Refer to Plates 5-15 and 5-16 for existing development and Plates 5-16 and 5-17 for the conceptual development plan for Spring Shores Unit, LPSP.

(b) Relocate county road around Spring Shores.

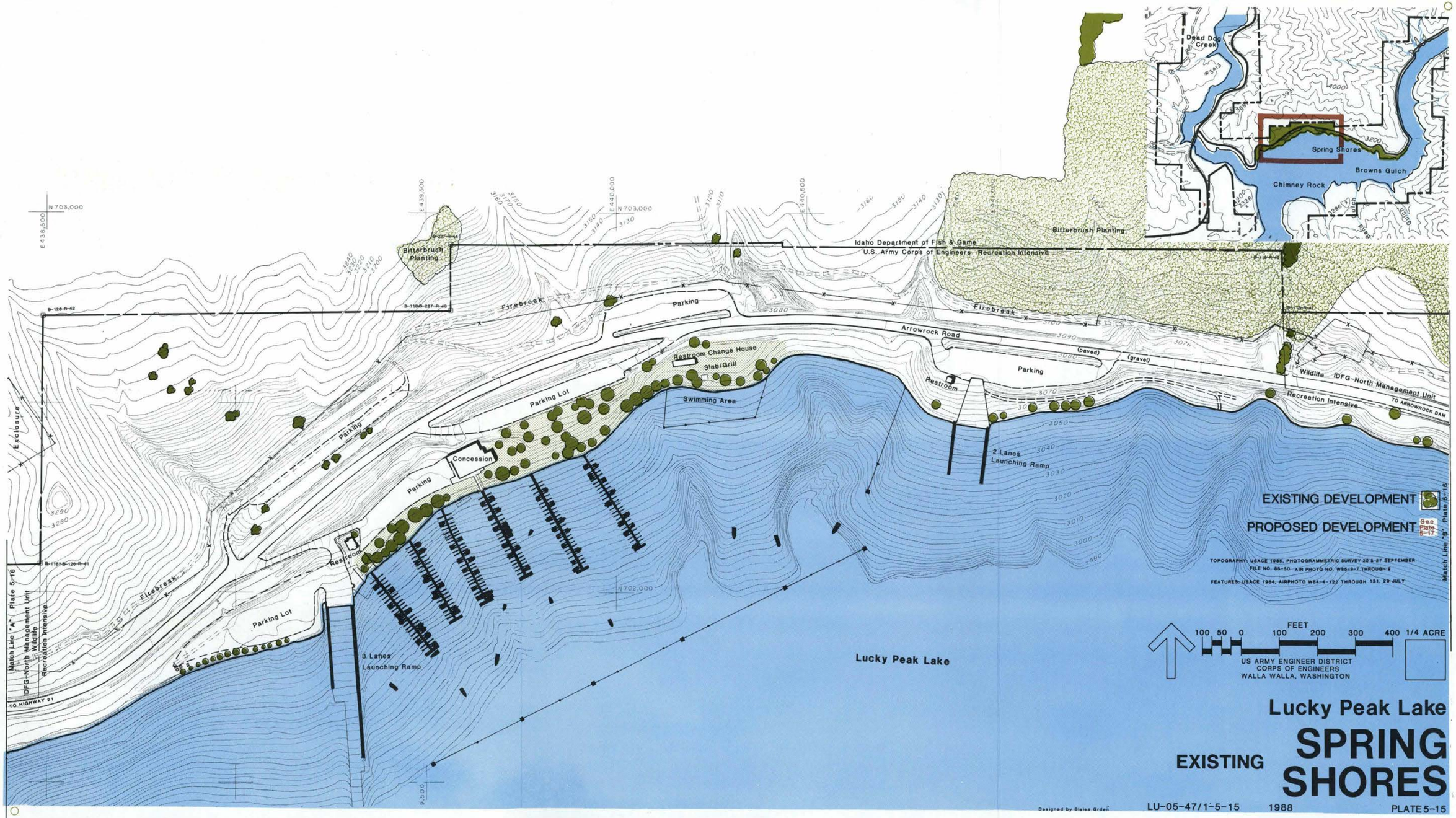
(c) Increase parking.

(d) Replace existing slips.

(e) Increase number of slips to approximately 500.

(f) Replace restrooms.

(g) Relocate fence to project boundary.

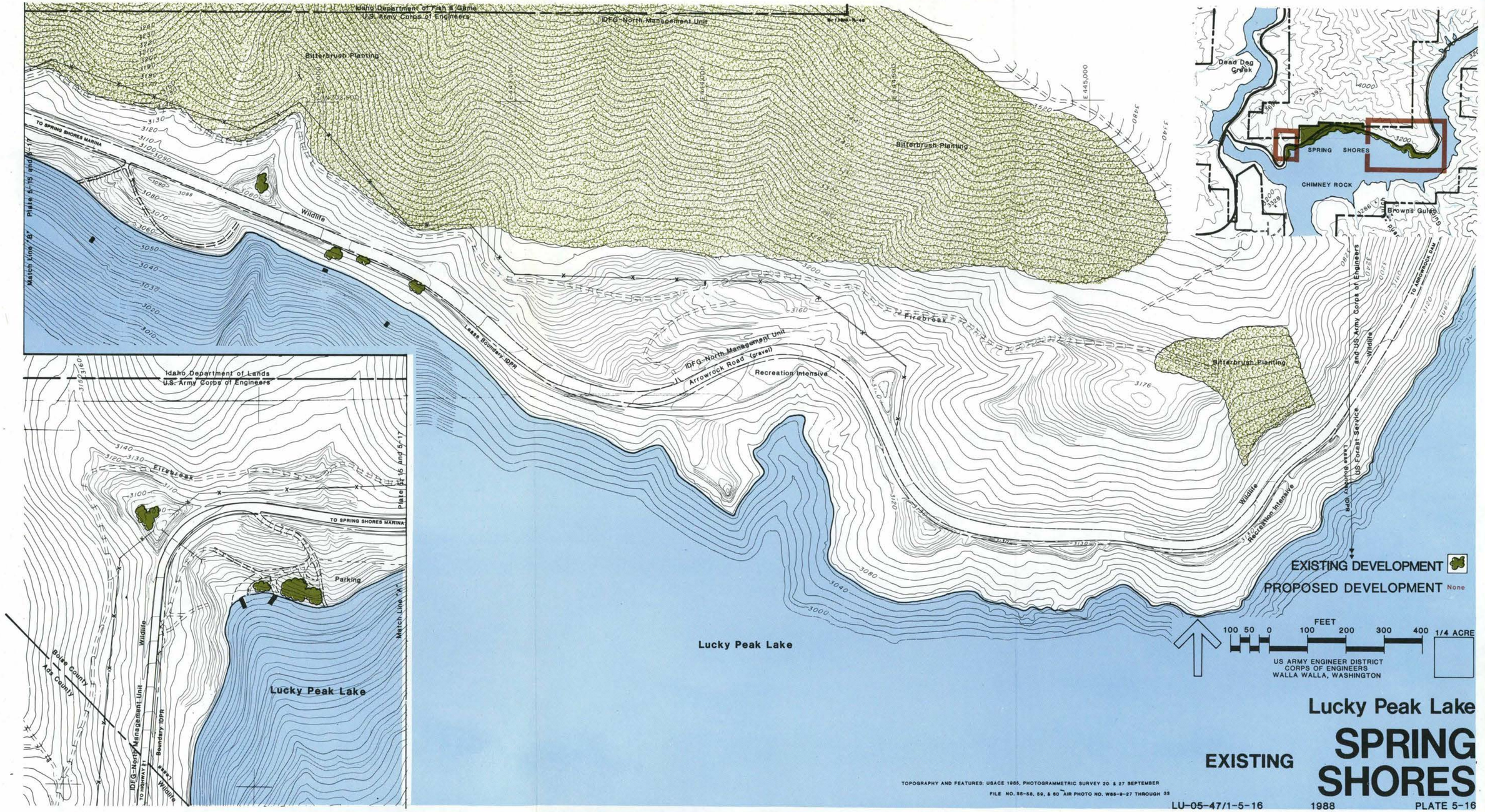


Lucky Peak Lake

EXISTING SPRING SHORES

Designed by Blaise Grdes

LU-05-47/1-5-15 1988 PLATE 5-15



Lucky Peak Lake

EXISTING SPRING SHORES

TOPOGRAPHY AND FEATURES: USACE 1985, PHOTOGRAMMETRIC SURVEY 20 & 27 SEPTEMBER
FILE NO. 85-56, 59, & 60 AIR PHOTO NO. W85-9-27 THROUGH 33

LU-05-47/1-5-16 1988 PLATE 5-16

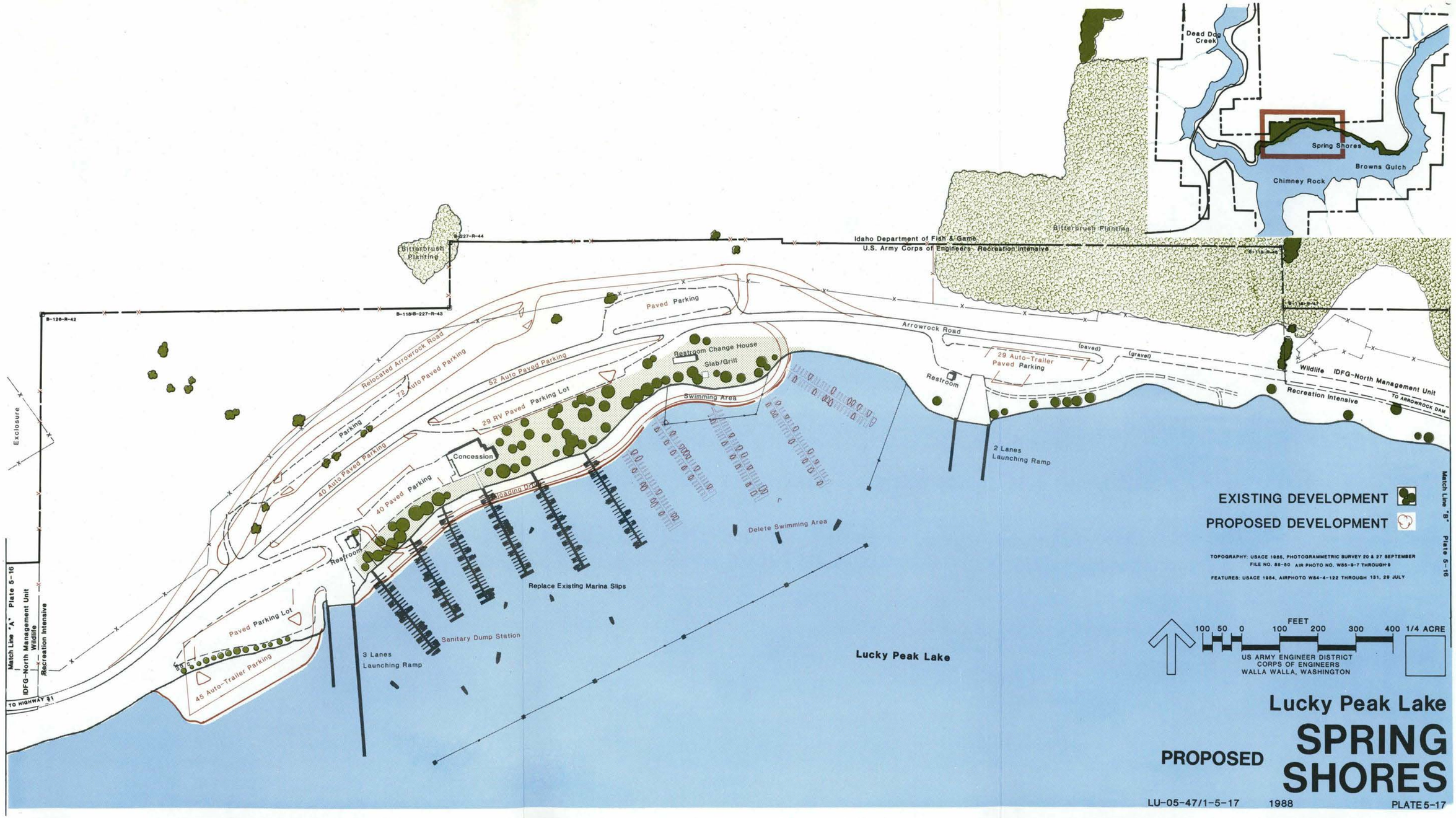

Dead Dog Creek
Spring Shores
Browns Gulch
Chimney Rock
Bitterbrush Planting
Idaho Department of Fish & Game
U.S. Army Corps of Engineers - Recreation Intensive
B-227-R-44
B-118/B-227-R-43
B-126-R-42
Bitterbrush Planting
Paved Parking
Relocated Arrowrock Road
72 Auto Paved Parking
52 Auto Paved Parking
29 RV Paved Parking Lot
Restroom Change House
Slab/Grill
Swimming Area
Arrowrock Road
(paved)
(gravel)
29 Auto-Trailer Paved Parking
Restroom
Wildlife IDFG-North Management Unit
Recreation Intensive
TO ARROWROCK DAM
Exclosure
Parking
40 Auto Paved Parking
Concession
40 Paved Parking
Unloading Dock
Restroom
2 Lanes Launching Ramp
Delete Swimming Area
Replace Existing Marina Slips
Paved Parking Lot
45 Auto-Trailer Parking
Sanitary Dump Station
3 Lanes Launching Ramp
Lucky Peak Lake
Match Line "A" Plate 5-16
IDFG-North Management Unit
Wildlife
Recreation Intensive
TO HIGHWAY 21
Match Line "B" Plate 5-16
EXISTING DEVELOPMENT
PROPOSED DEVELOPMENT
TOPOGRAPHY: USACE 1985, PHOTOGRAMMETRIC SURVEY 20 & 27 SEPTEMBER
FILE NO. 85-80 AIR PHOTO NO. W85-9-7 THROUGH 9
FEATURES: USACE 1984, AIRPHOTO W84-4-122 THROUGH 131, 29 JULY
100 50 0 100 200 300 400 FEET
1/4 ACRE
US ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WALLA WALLA, WASHINGTON
Lucky Peak Lake
PROPOSED
SPRING SHORES
LU-05-47/1-5-17
1988
PLATE 5-17

PHOTO 5-20. Chimney Rock Management Unit is easily recognized by the visual rock feature seen in the top left portion of the photo.

m. Chimney Rock Management Unit.

(1) Land Use Classification - Recreation Intensive.

(2) Acres - 77.6.

(3) Unit Description.

(a) Ecological Factors.

1. Landform - Flat area along shoreline with land rising towards the project boundary. A large basalt monolith dominates the unit.

2. Orientation - North.

3. Percent of Slope - Most of unit is 0-15 percent with the remaining 15-80+ percent.

4. Soils - Unsurveyed.

5. Vegetation - Honey locust, poplar, ash, ponderosa pine, and black locust (irrigated); and black cottonwood, sandbar willow, whiplash willow, willows, antelope bitterbrush, golden currant, Wood's rose, and blue elderberry.

6. Water Resources - Lucky Peak Lake, Bend Gulch, and Long Gulch.

7. Wildlife Resources - Mule deer, golden and bald eagles, coyote, chukar, songbirds, and red-tailed hawk.

(b) Cultural Factors.

1. Access - Boat access only.

2. Utilities - None.

3. Land Ownership/Management - USA/USACE.

4. Outgrants - None.

5. Adjacent Management Units - IDFG East.

6. Adjacent Ownership/Management Outside Project - USA/USBLM and IDFG.

7. Existing Developments - 6 acres of development with vault restroom, 8 sun shelters (with tables and barbecue grills), 8 tie-up docks, ski dock, information kiosk, large irrigated lawn and shade trees, and an irrigation system with a floating portable pump.

8. Visitor Use - Picnicking, boating, hiking, water skiing, hunting, and primitive camping. (Note: Primitive camping is not permitted under Title 36.)

9. Archaeological-Historical Resources - Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

The large 120-foot-high basalt rock is an outstanding visual feature.

(4) Influencing and Constraining Factors.

Chimney Rock is the major boat access site on the lake. It has boat site only access, no available utilities, lack of potable water, and rattlesnakes in the undeveloped area.

(5) Resource Objectives.

(a) Objectives.

1. CONTINUE INTENSIVE RECREATION WITH THE PRIMARY EMPHASIS ON BOATING ACCESS AND DAY USE.

2. Develop irrigated wildlife plantings on the management unit to provide food and cover for wildlife.

(b) Rationale.

1. Chimney Rock is the largest boat-access-only site on Lucky Peak Lake. The large lawn offers opportunities for games and other picnic activities. Use of the unit during the summer recreation season has few negative impacts on wildlife and meets regional recreational needs.

2. Additional trees and shrubs will provide hiding, roosting, thermal, and nesting cover for a variety of wildlife species. A perennial food planting will provide food for young upland game birds and other wildlife. Both types of plantings will attract wildlife that can be viewed by recreationists. Soils should be surveyed prior to detailed planning of development (see Section 8, paragraph (3) on page 8-4.)

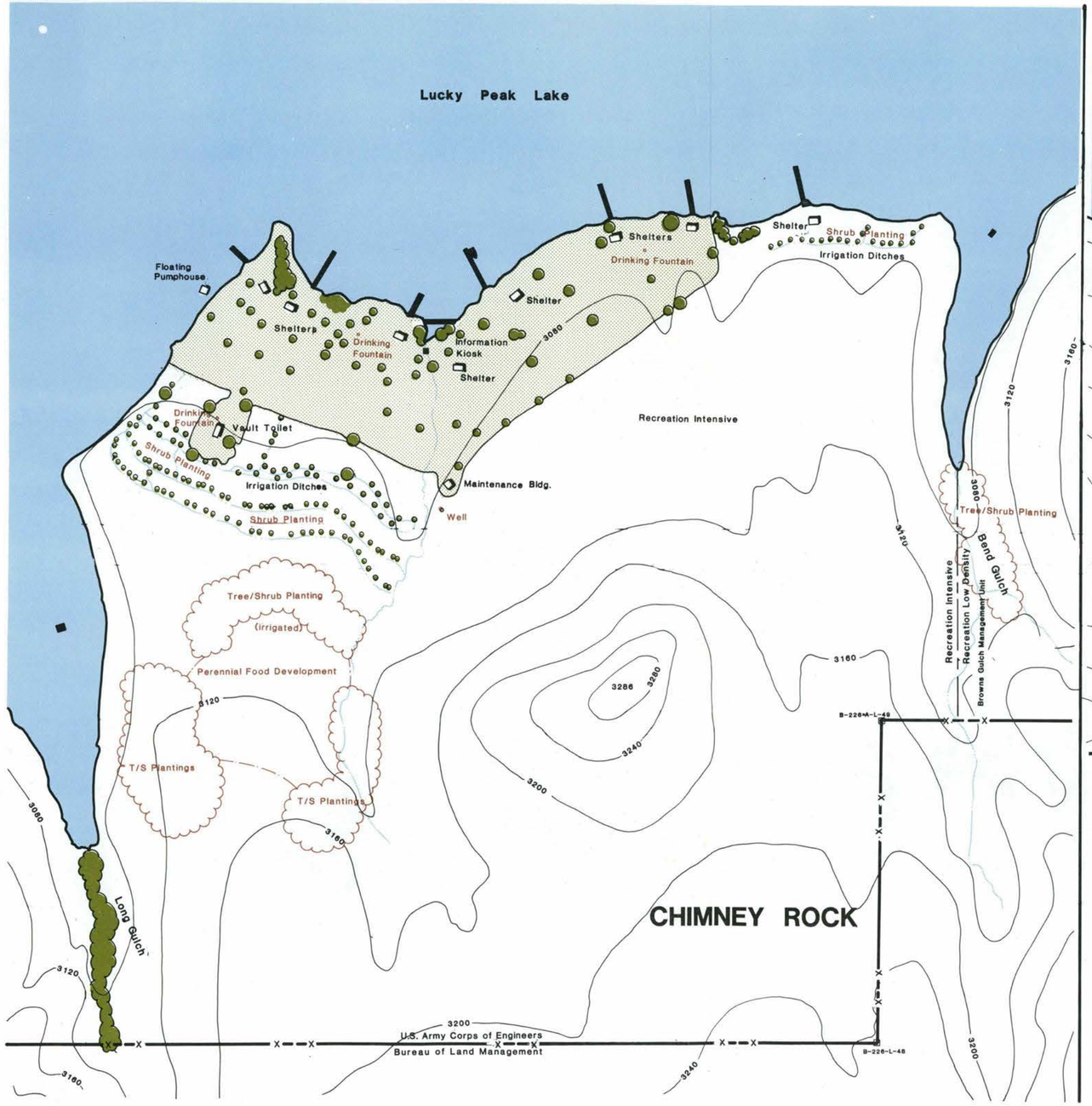
(6) Development and Management Concepts.

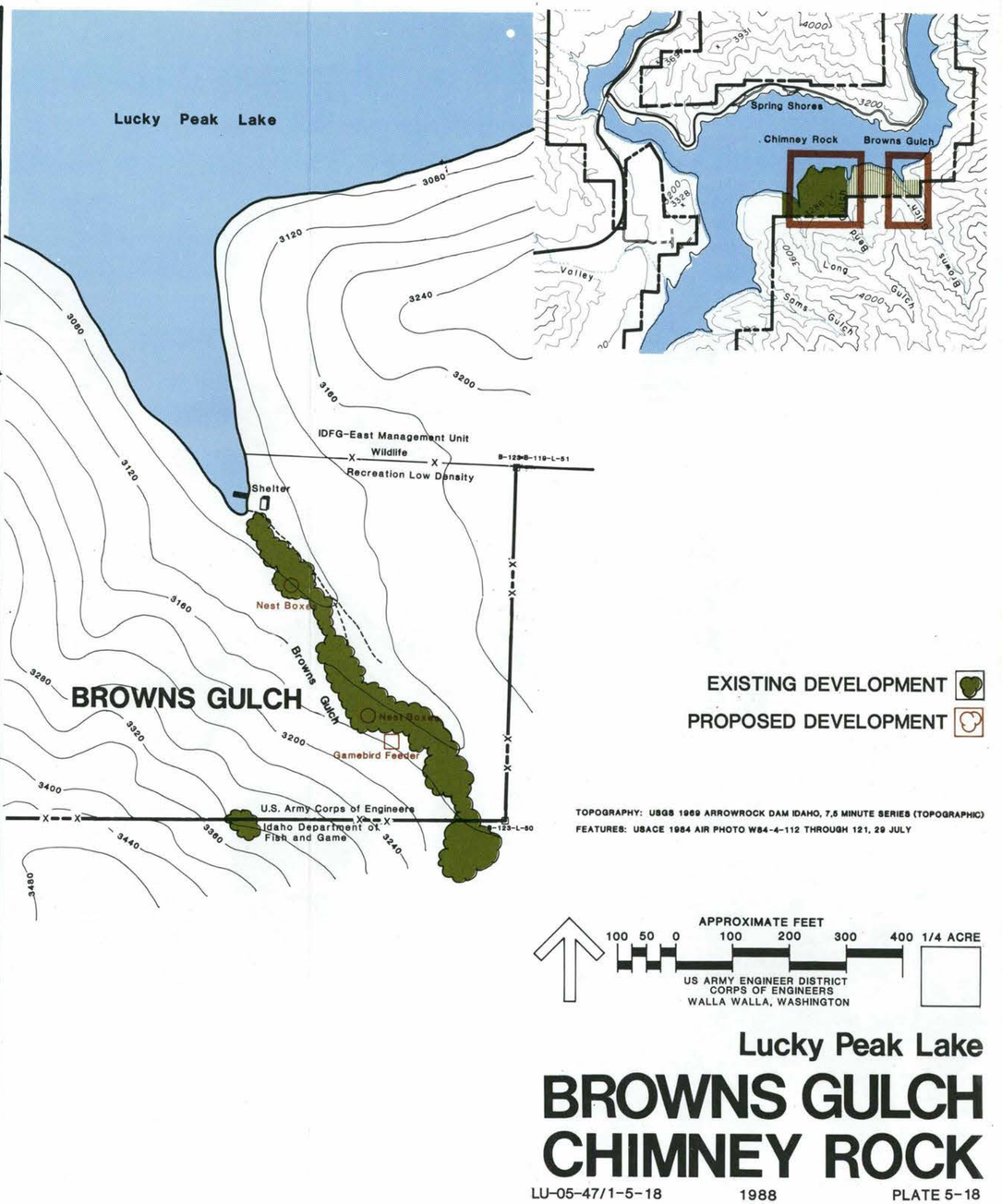
(a) Refer to Plate 5-18 for conceptual development plan for Chimney Rock. Provide potable water from well and distribution system drinking fountains.

(b) Establish tree and shrub plantings along Bend Gulch and on the flat behind the recreation area.

(c) Establish perennial food planting on the flat behind the high-density recreation area.

(d) Construct irrigation system to provide water for tree and shrub plantings and perennial food plots.





EXISTING DEVELOPMENT

PROPOSED DEVELOPMENT

TOPOGRAPHY: USGS 1969 ARROWROCK DAM IDAHO, 7.5 MINUTE SERIES (TOPOGRAPHIC)
FEATURES: USACE 1984 AIR PHOTO W84-4-112 THROUGH 121, 29 JULY

APPROXIMATE FEET
100 50 0 100 200 300 400 1/4 ACRE

US ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WALLA WALLA, WASHINGTON

Lucky Peak Lake

BROWNS GULCH
CHIMNEY ROCK

LU-05-47/1-5-18 1988 PLATE 5-18

PHOTO 5-21. Browns Gulch Management Unit.

n. Browns Gulch Management Unit.

(1) Land Use Classification - Recreation Low Density.

(2) Acres - 56.6.

(3) Unit Description.

(a) Ecological Factors.

1. Landform - Very steep.

2. Orientation - East and west.

3. Percent of Slope - 25+ percent.

4. Soils - Unsurveyed.

5. Vegetation - Native grasses and forbs.

6. Water Resources - Browns Gulch (intermittent) and Lucky Peak Lake.

7. Wildlife Resources - Mule deer, coyote, golden and bald eagles, and chukar.

(b) Cultural Factors.

1. Access - Boat access only.

2. Utilities - None.

3. Land Ownership/Management - USA/USACE.

4. Outgrants - None.

5. Adjacent Management Units - Chimney Rock and IDFG - East.

6. Adjacent Ownership/Management Outside Project - IDFG.

7. Existing Developments - 1 sun shelter with picnic table and tie-up dock.

8. Visitor Use - Boating, picnicking, and hiking.

9. Archaeological-Historical Resources - Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

Steep slopes and riparian vegetation.

(4) Influencing and Constraining Factors.

Steep slopes and water access only.

(5) Resource Objectives.

(a) Objectives.

1. CONTINUE LOW-DENSITY DAY-USE RECREATION WITH THE EMPHASIS ON BOATING, PICNICKING, AND HIKING.

2. Improve habitat for cavity-nesting birds.

3. Improve food source for young upland game birds.

(b) Rationale.

1. Browns Gulch offers opportunities for low-density recreation which is a regional need as outlined in TA - Volume 2.

2. Suitable cavities for cavity-nesting birds are not available. The installation of nest boxes will increase the number of these birds available for viewing by recreationists.

3. Steep topography precludes the establishment of food plots to provide food for young upland game birds and other wildlife. Game-bird feeders are an alternate way to provide food for and to attract wildlife which can be enjoyed by recreationists.

(6) Development and Management Concepts.

(a) Refer to Plate 5-18 for conceptual development plan for Browns Gulch.

(b) Install nest boxes for cavity-nesting birds.

(c) Install upland game-bird feeder.

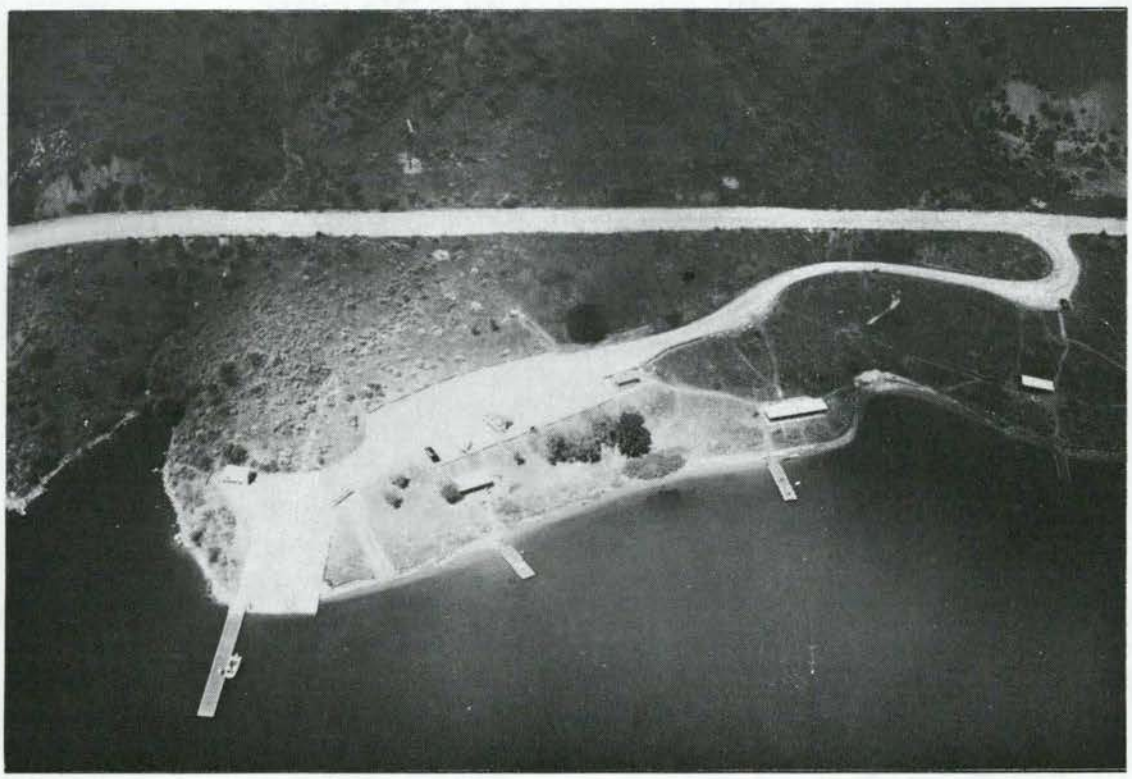


PHOTO 5-22. Macks Creek Management Unit.

o. Macks Creek Management Unit.

(1) Land Use Classification - Recreation Intensive.

(2) Acres - 72.6 (includes 69.4 acres of USFS interchange lands).

(3) Unit Description.

(a) Ecological Factors.

1. Landform - South facing slope. Moderate slopes between the shoreline and county road. Much steeper lands above the county road.

2. Orientation - South facing slope.

3. Percent of Slope - 15-25 percent.

4. Soils - Franktown-Gouse Creek Association, 40- to 70-percent slopes (120b-3).

5. Vegetation - Rocky Mountain maple, water birch, hackberry, red-osier dogwood, Douglas hawthorn, ponderosa pine, black cottonwood, sandbar willow, whiplash willow, willows, Saskatoon serviceberry, bittercherry, common chokecherry, antelope bitterbrush, golden currant, Wood's rose, black raspberry, blue elderberry, and shiny-leaf spirea.

6. Water Resources - Macks Creek and Lucky Peak Lake.

7. Wildlife Resources - Mule deer, rabbit, golden and bald eagles, chukar, mallard, and common merganser.

(b) Cultural Factors.

1. Access - State Highway 21 and Arrowrock Road (Boise and Ada County) paved to second launching area at Spring Shores and then gravel.

2. Utilities - Electricity available, possibly telephone.

3. Land Ownership/Management - USA/USACE (acquired through interchange dated 27 June 1988).

4. Outgrants - None.

5. Adjacent Management Units - IDFG North.

6. Adjacent Ownership/Management Outside Project - IDFG and USA/USFS.

7. Existing Developments - Launching ramp with 2 lanes down to elevation 3050, handling dock, 4 sun shelters with picnic tables and firepits, 4 tie-up docks, 3 ski docks, potable water (spring source), vault restroom, parking for 11 vehicles and 21 vehicles with trailers, tree plantings, and bitterbrush plantings.

8. Visitor Use - Boat launching, picnicking, sunbathing, fishing, and sightseeing.

9. Archaeological-Historical Resources - Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

Extremely steep slopes across lake, isolation from main area of lake. Riparian vegetation of Macks Creek.

(4) Influencing and Constraining Factors.

(a) Factors which influence the future development of the site are the condition and location of the existing road. The road is gravel which hinders accessibility to the site; many visitors will not travel on gravel roads. The current restroom does not meet state safety standards. Drinking water is from a spring and may be a health problem in the future.

(b) Area suitable for expansion, especially for parking, is located across the Arrowrock County Road.

(5) Resource Objectives.

(a) Objectives.

1. MANAGE AND ENHANCE MACKS CREEK MANAGEMENT UNIT AS AN INTENSIVE RECREATION AREA WITH EMPHASIS ON DAY USE AND BOAT LAUNCHING.

2. Improve food source for young upland game birds.

(b) Rationale.

1. Macks Creek recreation area is located just below Arrowrock Dam on the upper end of the lake. Boat launching at this location helps to disperse boats on the lake. Currently the boat launching ramp can only be used at normal high pool elevation 3055. The parking is very inadequate for the existing launching ramp. Macks Creek is the only recreation unit on Lucky Peak which has the possibility of major expansion of day-use facilities. Expansion will help meet the regional recreation goals and meet the accepted carrying capacity on the lake. Currently, the number of boat launching ramps and available parking area is limiting the use of the entire lake.

2. Steep topography precludes the establishment of food plots to provide food for young upland game birds and other wildlife. Game-bird feeders are an alternate way to provide food for and to attract wildlife which can be enjoyed by recreationists.

(6) Development and Management Concepts.

(a) Refer to Plate 5-19 for conceptual development plan for Macks Creek.

(b) Replace restroom.

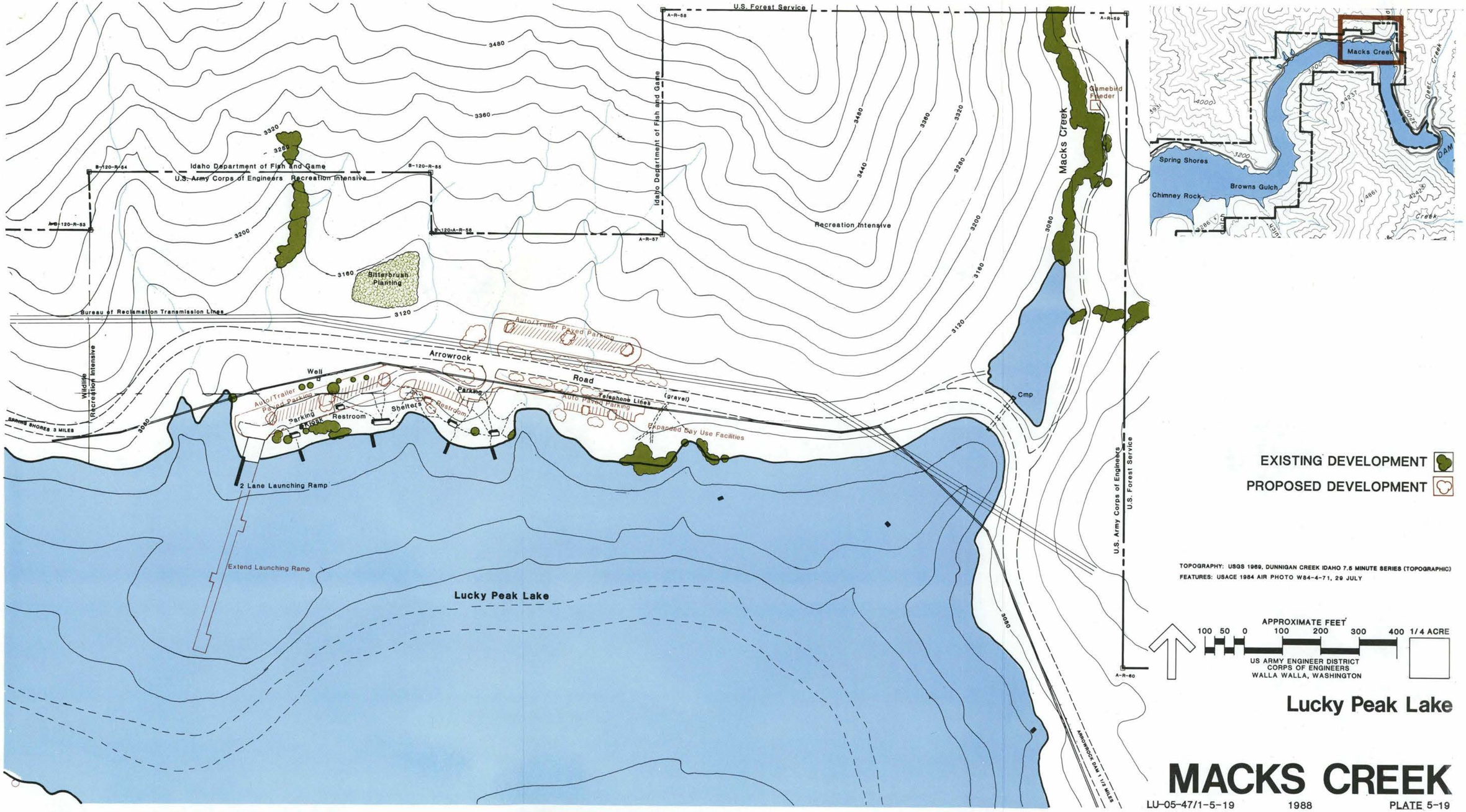
(c) Extend launching ramp.

(d) Provide additional parking to maximize the use of the launching ramp.

(e) Install upland game-bird feeder.

(f) Ensure potable water meets state standards.

(g) Consider the possibility of relocating the county road around future parking area to provide safer facilities.



MACKS CREEK

LU-05-47/1-5-19 1988 PLATE 5-19

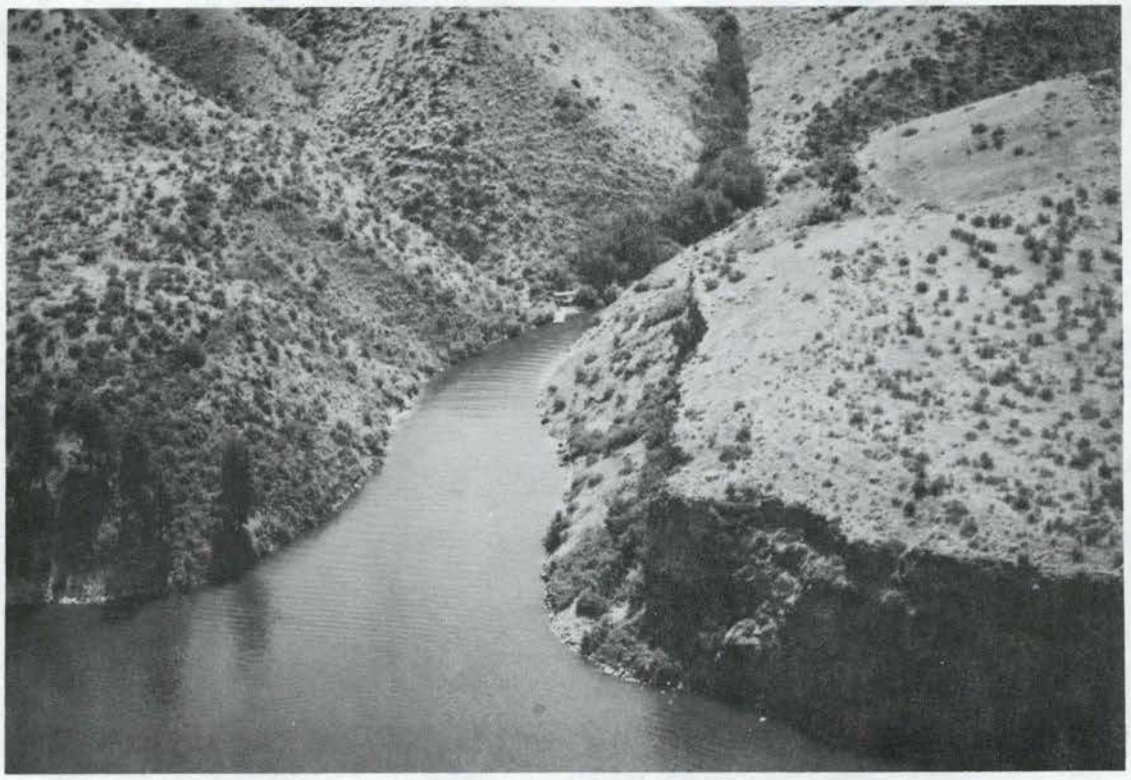


PHOTO 5-23. Dead Dog Creek Management Unit.

p. Dead Dog Creek Management Unit.

(1) Land Use Classification - Recreation Low Density.

(2) Acres - 14.3.

(3) Unit Description.

(a) Ecological Factors.

1. Landform - Very steep area at the mouth of Dead Dog Creek.

2. Orientation - Northeast.

3. Percent of Slope - 25+ percent.

4. Soils - Basalt-Supkin undifferentiated, 50- to 80-percent slopes (135-1) and moderately deep, sandy, and fine loamy, Xeric soils, 40- to 70-percent slopes (140b-3).

5. Vegetation - Riparian along Dead Dog Creek.

6. Water Resources - Dead Dog Creek (intermittent) and Mores Creek Arm of Lucky Peak Lake.

7. Wildlife Resources - Mule deer, coyote, golden and bald eagles, California quail, and songbirds.

(b) Cultural Factors.

1. Access - Boat access only.

2. Utilities - None.

3. Land Ownership/Management - USA/USACE.

4. Outgrants - None.

5. Adjacent Management Units - IDFG West.

6. Adjacent Ownership/Management Outside Project - USA/USFS and USBLM.

7. Existing Developments - Sun shelter and tie-up dock.

8. Visitor Use - Picnicking.

9. Archaeological-Historical Resources - Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

Riparian vegetation.

(4) Influencing and Constraining Factors.

No area for expansion due to steep slopes. Boat access only.

(5) Resource Objectives.

(a) Objectives.

1. CONTINUE TO MANAGE THE UNIT AS LOW-DENSITY DAY-USE RECREATION AREA WITH THE EMPHASIS ON DAY USE AND BOATING.

2. Improve food source for young upland game birds.

(b) Rationale.

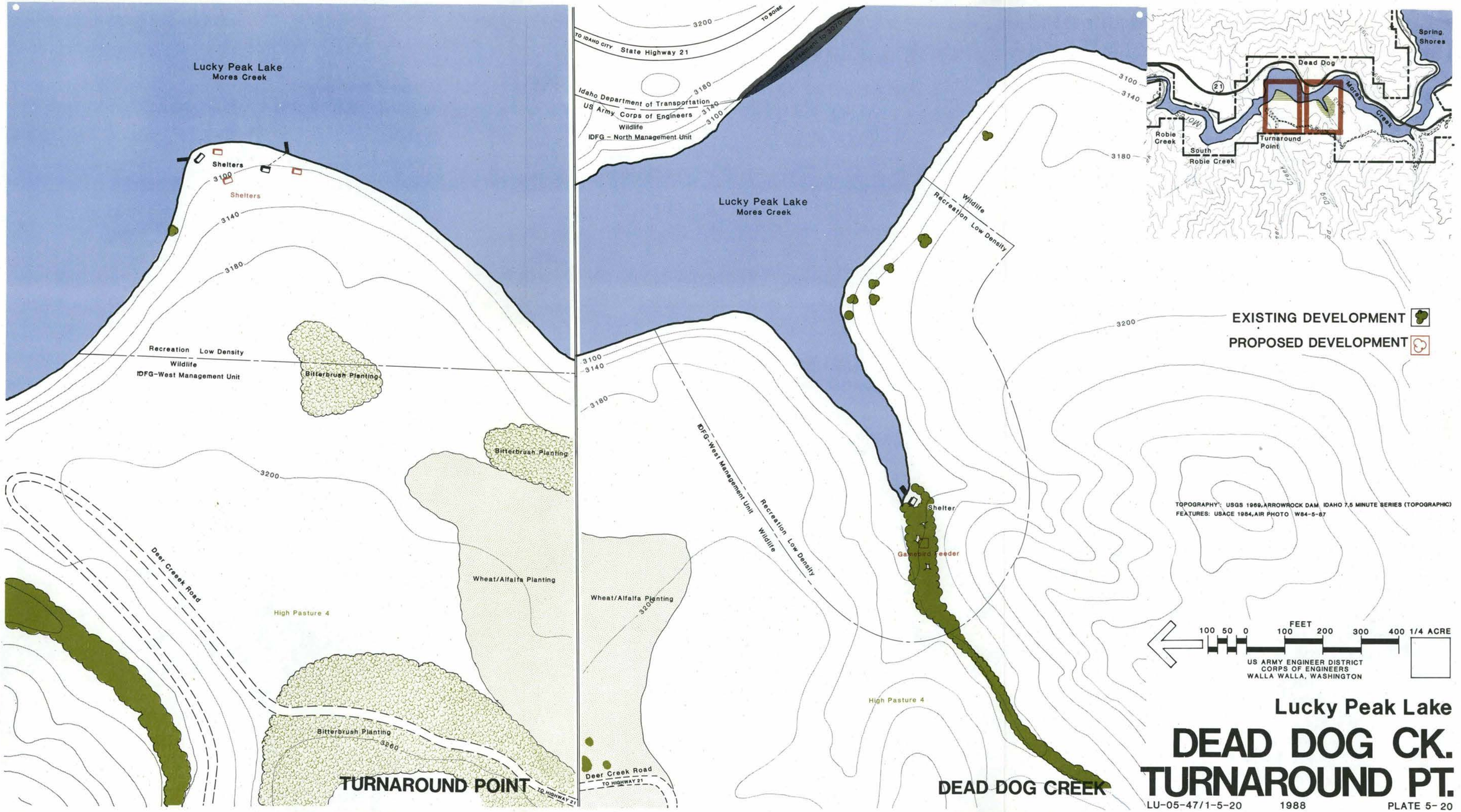
1. Dead Dog Creek is one of the few areas on Mores Creek Arm suitable for picnicking and day use. The facilities at Dead Dog help meet the regional recreational goals within Lucky Peak PSMA, as described in TA - Volume 2.

2. Steep topography precludes the establishment of food plots to provide food for young upland game birds and other wildlife. Game-bird feeders are an alternate way to provide food for and to attract wildlife which can be enjoyed by recreationists.

(6) Development and Management Concepts.

(a) Refer to Plate 5-20 for conceptual development plan for Dead Dog Creek.

(b) Install upland game-bird feeder.


Lucky Peak Lake
Mores Creek
Shelters
Shelters
3100
3140
3180
Recreation Low Density
Wildlife
IDFG-West Management Unit
Bitterbrush Planting
Bitterbrush Planting
3200
Deer Creek Road
High Pasture 4
Wheat/Alfalfa Planting
Bitterbrush Planting
3260
TURNAROUND POINT
TO HIGHWAY 21
TO IDAHO CITY
State Highway 21
3200
TO BOISE
3180
Idaho Department of Transportation
US Army Corps of Engineers
Wildlife
IDFG - North Management Unit
3140
3100
Lucky Peak Lake
Mores Creek
Wheat/Alfalfa Planting
3200
Deer Creek Road
TO HIGHWAY 21
IDFG-West Management Unit
Recreation Low Density
Wildlife
Shelter
Gamebird Feeder
High Pasture 4
DEAD DOG CREEK
3100
3140
3180
Wildlife
Recreation Low Density
3200
Spring Shores
Dead Dog
Mores Creek
21
Robie Creek
South Robie Creek
Turnaround Point
EXISTING DEVELOPMENT
PROPOSED DEVELOPMENT
TOPOGRAPHY: USGS 1969,ARROWROCK DAM IDAHO 7.5 MINUTE SERIES (TOPOGRAPHIC)
FEATURES: USACE 1984,AIR PHOTO W84-5-87
100 50 0 100 200 300 400 FEET
1/4 ACRE
US ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WALLA WALLA, WASHINGTON
Lucky Peak Lake
DEAD DOG CK.
TURNAROUND PT.
LU-05-47/1-5-20
1988
PLATE 5-20

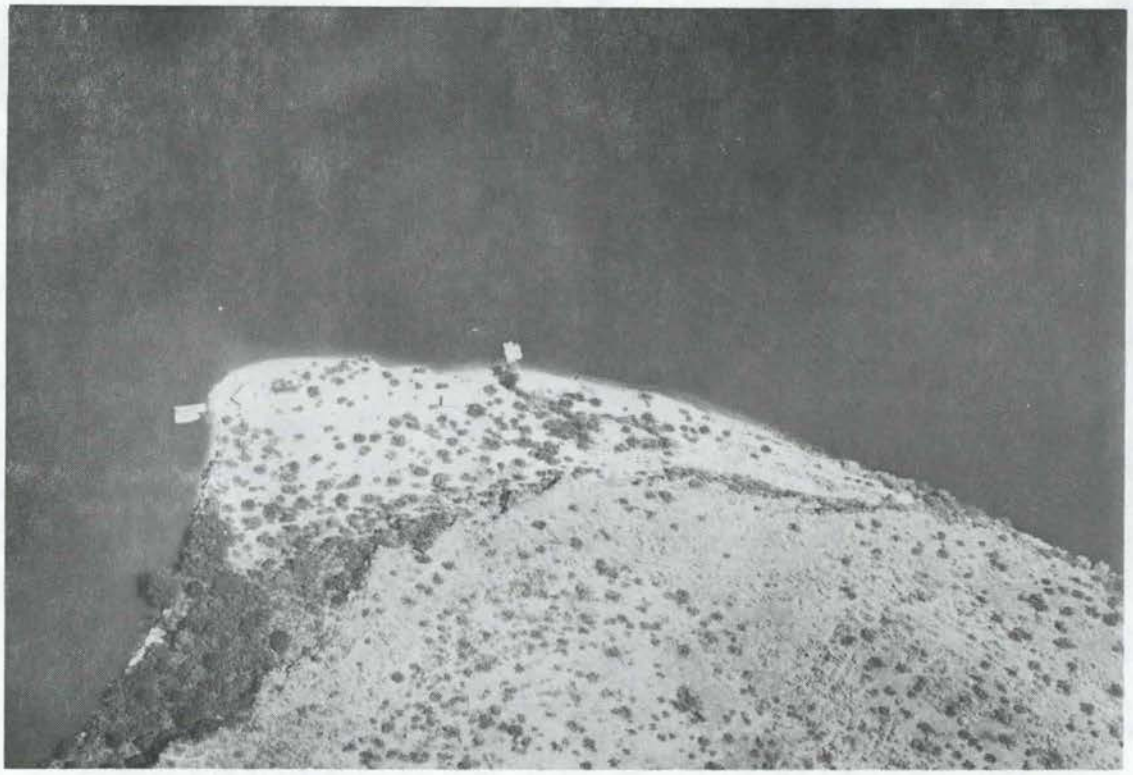


PHOTO 5-24. Turnaround Point.

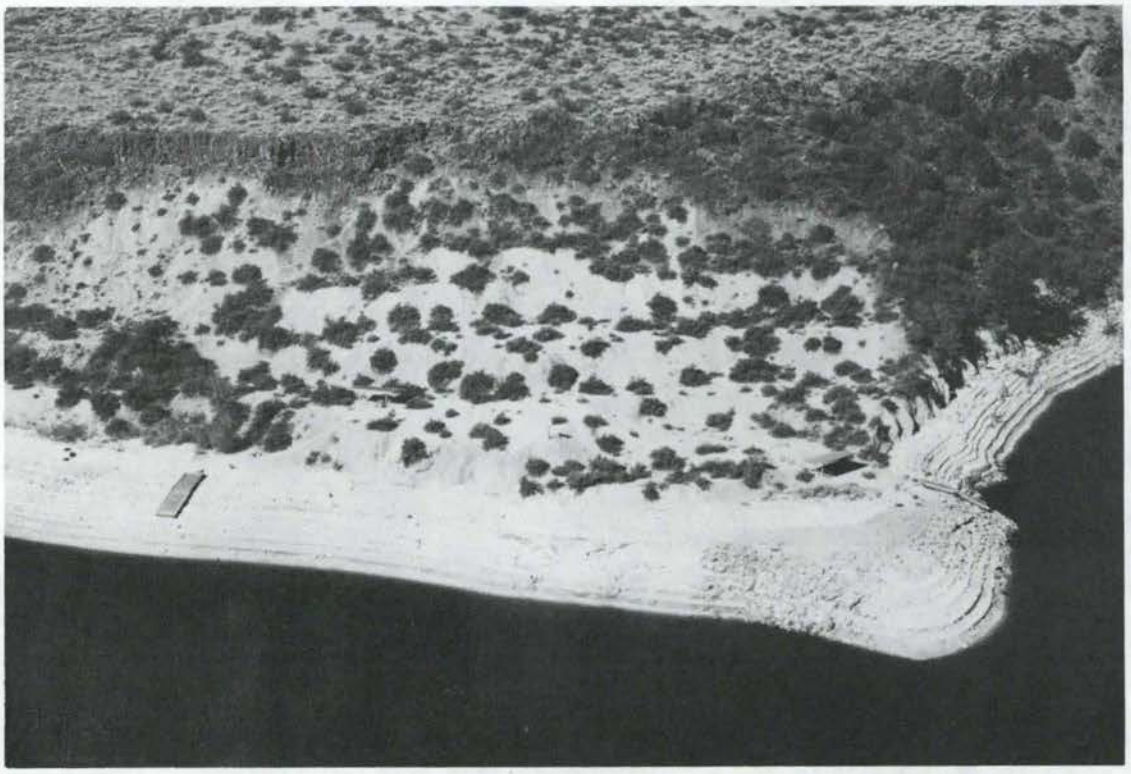


PHOTO 5-25. Turnaround Point.

q. Turnaround Point Management Unit.

(1) Land Use Classification - Recreation Low Density.

(2) Acres - 12.1.

(3) Unit Description.

(a) Ecological Factors.

1. Landform - Steep slopes.

2. Orientation - East.

3. Percent of Slope - 25+ percent.

4. Soils - Basalt-Supkin undifferentiated, 50- to 80-percent slopes (135-1).

5. Vegetation - Native grasses and forbs.

6. Water Resources - Lucky Peak Lake and Mores Creek Arm.

7. Wildlife Resources - Mule deer, coyote, golden and bald eagles, and chukar.

(b) Cultural Factors.

1. Access - Boat.

2. Utilities - None.

3. Land Ownership/Management - USA/USACE.

4. Outgrants - None.

5. Adjacent Management Units - IDFG West.

6. Adjacent Ownership/Management Outside Project - USA/USFS.

7. Existing Developments - 2 sun shelters with picnic table and 2 handling docks.

8. Visitor Use - Picnicking.

9. Archaeological-Historical Resources - Old quarry; also, refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

Excellent view of surrounding Mores Creek Arm.

(4) Influencing and Constraining Factors.

Limited access, steep slopes, and no utilities.

(5) Resource Objectives.

(a) Objective.

CONTINUE TO MANAGE THE UNIT AS LOW-DENSITY DAY-USE AREA WITH THE EMPHASIS ON DAY USE AND BOATING.

(b) Rationale.

Turnaround Point is the only area along Mores Creek Arm of Lucky Peak Lake where boats with water skiers can easily turn around. The remaining areas of Mores Creek Arm are narrow and extremely difficult to turn around a boat and skiers. The day-use facilities help meet regional needs within Lucky Peak PSMA.

(6) Development and Management Concepts.

Refer to Plate 5-20 for conceptual development plan for Turnaround Point.

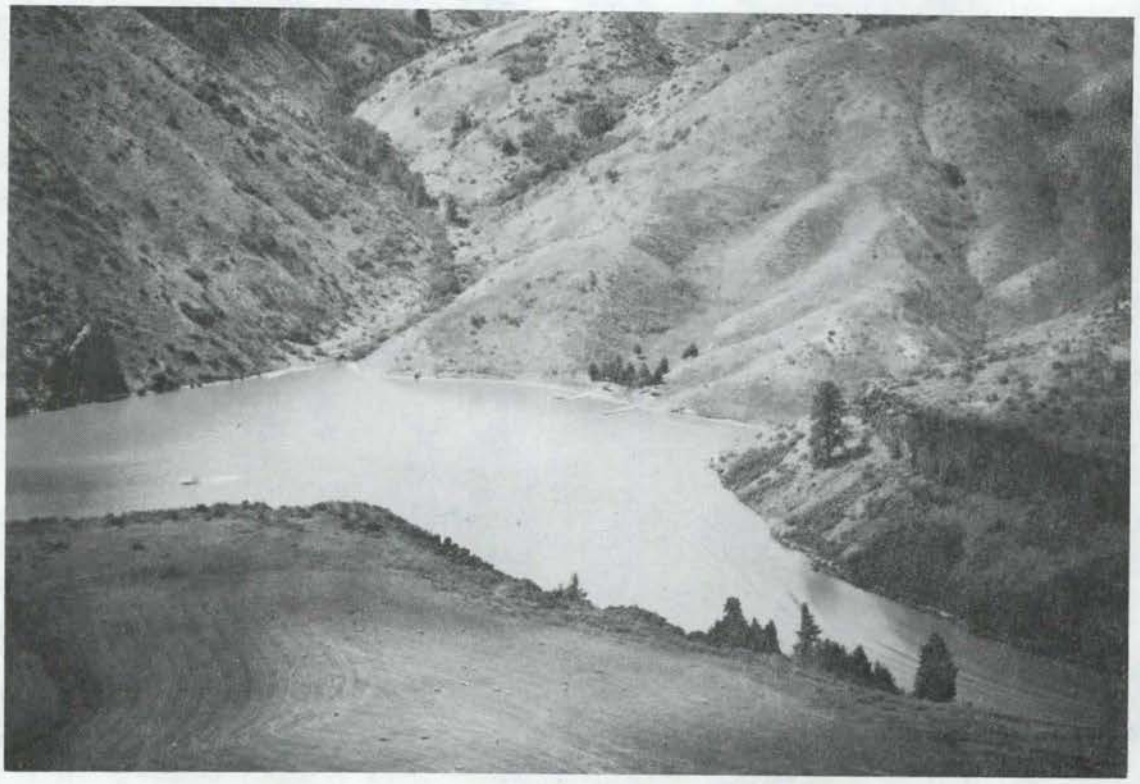


PHOTO 5-26. South Robie Creek.

r. South Robie Creek Management Unit.

(1) Land Use Classification - Recreation Low Density.

(2) Acres - 71.6.

(3) Unit Description.

(a) Ecological Factors.

1. Landform - The area along the shore is moderately flat.

2. Orientation - South and east.

3. Percent of Slope - 15- to 25-percent developed area and 25+ percent other areas.

4. Soils - Basalt-Supkin undifferentiated, 50- to 80-percent slopes (135-1).

5. Vegetation - Ponderosa pine, willows, bittercherry, common chokecherry, antelope bitterbrush, and golden currant.

6. Water Resources - Unnamed stream (ephemeral) and Lucky Peak Lake.

7. Wildlife Resources - Mule deer, golden and bald eagles, and songbirds.

(b) Cultural Factors.

1. Access - Boat access only.

2. Utilities - None.

3. Land Ownership/Management - USA/USACE.

4. Outgrants - Highland Livestock Co., 104-13, Sheep Trail R/W, Reservation, indefinite. Highland Livestock Co., 69-75, Grazing Land, license expires 16 December 2007.

5. Adjacent Management Units - Robie Creek and IDFG West.

6. Adjacent Ownership Outside Project - Private.

7. Existing Developments - Vault (pit) toilet, 3 sun shelters with picnic tables, 2 tie-up docks, and irrigated ponderosa pines.

8. Visitor Use - Picnicking and boating.

9. Archaeological-Historical Resources -Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

Excellent view down Mores Creek Arm.

(4) Influencing and Constraining Factors.

Boat access site only; no area for expansion.

(5) Resource Objectives.

(a) Objectives.

1. CONTINUE TO MAINTAIN LOW-DENSITY RECREATION WITH EMPHASIS ON DAY USE AND BOATING.

2. Provide additional cover for wildlife.

(b) Rationale.

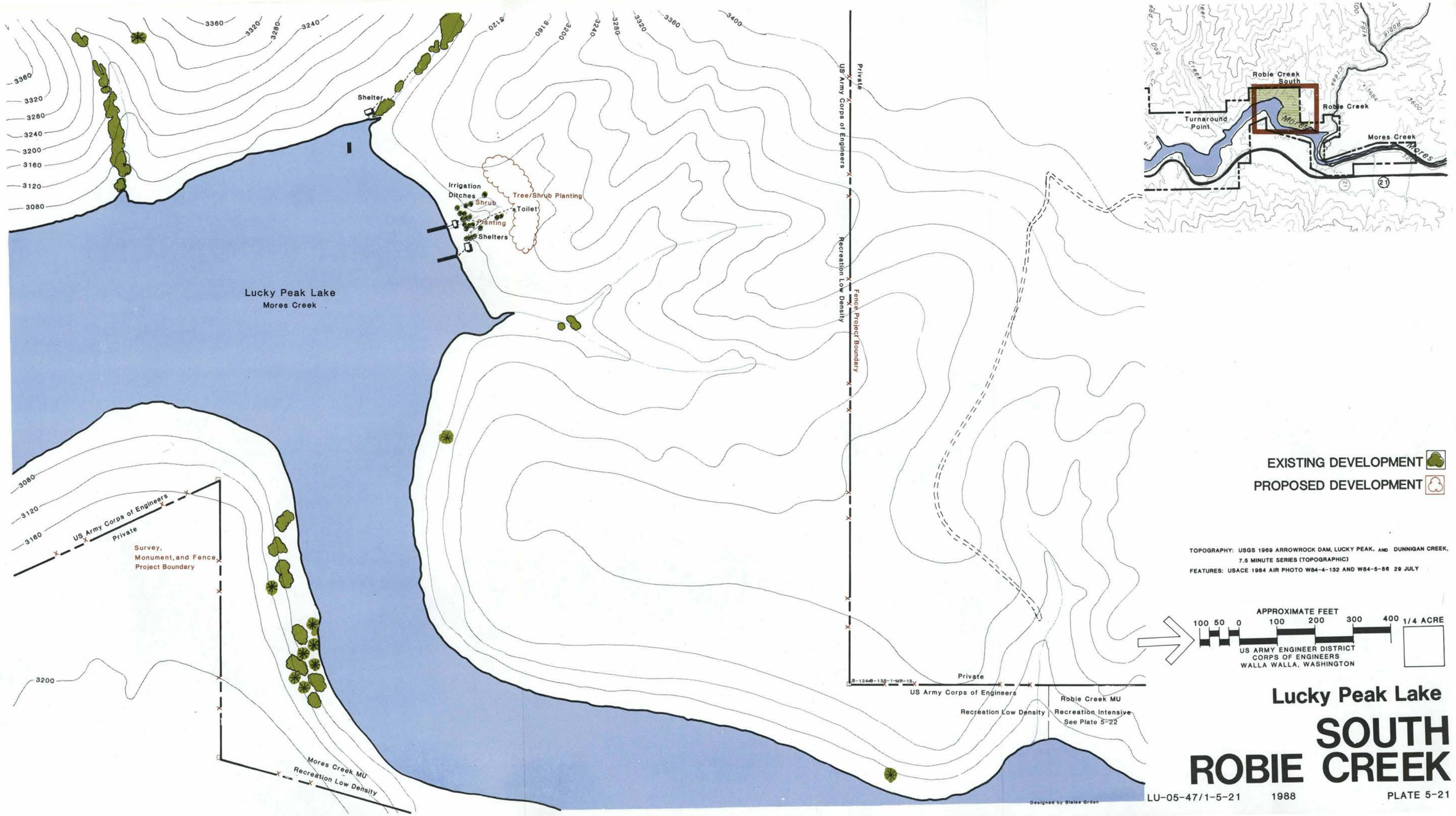
1. South Robie Creek offers excellent recreation opportunities for boating and day use. The facilities at South Robie Creek help meet the recreation needs within the Lucky Peak PSMA.

2. Additional trees and shrubs are needed to provide hiding, thermal, feeding, roosting, and nesting cover for birds and mammals. A tree and shrub planting will attract wildlife which can be viewed by recreationists.

(6) Development and Management Concepts.

(a) Refer to Plate 5-21 for conceptual development plan for South Robie Creek.

(b) Plant additional trees and shrubs behind existing trees at picnic area.



Lucky Peak Lake

SOUTH ROBIE CREEK

LU-05-47/1-5-21 1988 PLATE 5-21

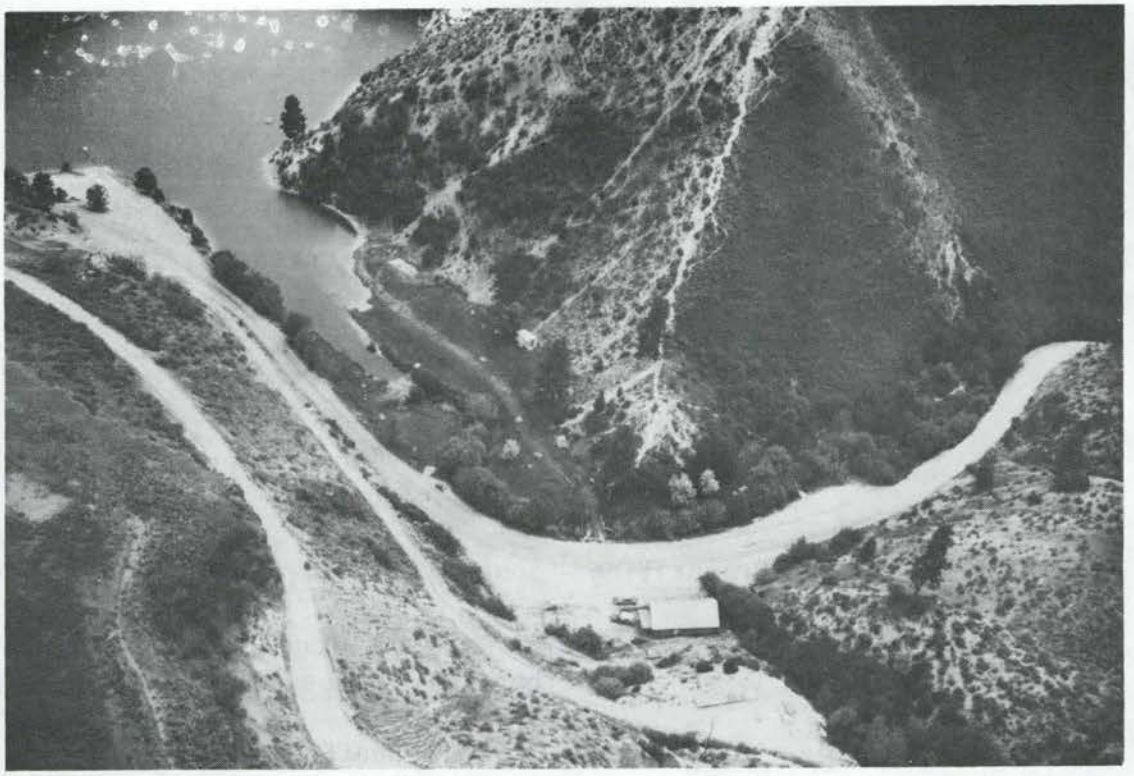


PHOTO 5-27. Robie Creek Management Unit.

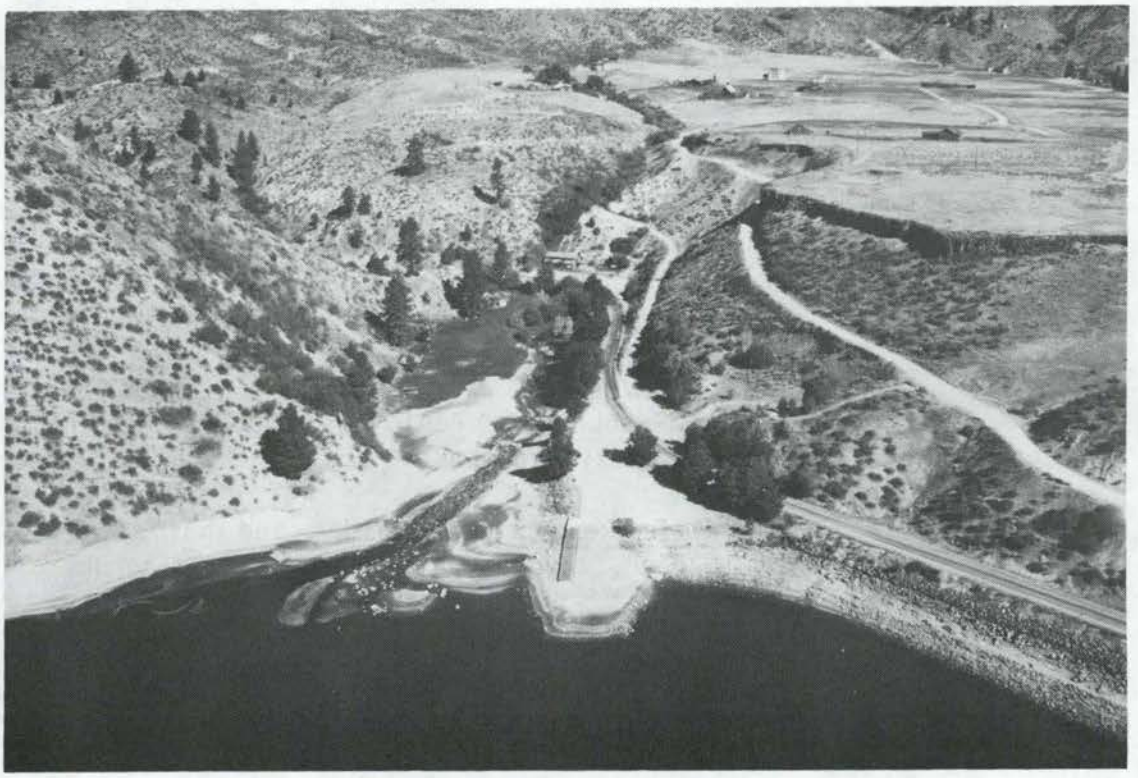


PHOTO 5-28. Robie Creek Management Unit - at a lower pool.

s. Robie Creek Management Unit.

(1) Land Use Classification - Recreation Intensive.

(2) Acres - 26.9.

(3) Unit Description.

(a) Ecological Factors.

1. Landform - The unit is very flat at the point where Robie Creek enters Mores Creek. The rest of the unit is very steep.

2. Orientation - South.

3. Percent of Slope - Bottom along Robie Creek 0 to 15 percent; other area 25+ percent.

4. Soils - Basalt-Supkin undifferentiated, 50- to 80-percent slopes (135-1), shallow and moderately deep skeletal, sandy and loamy, Xeric soils, and 30- to 70-percent slopes (140c-3).

5. Vegetation - Weeping willow, Russian olive, Rocky Mountain maple, mountain alder, water birch, red-osier dogwood, Douglas hawthorn, ponderosa pine, black locust, bittercherry, common chokecherry, antelope bitterbrush, cascara, golden currant, Wood's rose, black raspberry, thimbleberry, blue elderberry, common snowberry, and willows.

6. Water Resources - Robie Creek and Mores Creek Arm of Lucky Peak Lake.

7. Wildlife Resources - Golden and bald eagles, mule deer, coyote, ruffed grouse, and songbirds.

(b) Cultural Factors.

1. Access - State Highway 21 and Robie Creek Road (paved) in Boise County.

2. Utilities - Electricity and telephone (available).

3. Land Ownership/Management - USA/USACE.

4. Outgrants - County of Boise, 65-50, Arrowrock and Robie Creek Road Easement; Ranch Water User's Association, 76-19 access road (Burnett Drive), license; and Highland Livestock Co., 102-2, sheep right-of-way trail, easement.

5. Adjacent Management Units - South Robie Creek and Mores Creek.

6. Adjacent Ownership Outside Project - Private.

7. Existing Developments - Swimming area and beach, vault restroom, playground equipment, irrigated lawn area, 10 picnic tables, grills, well and pump house, irrigation and potable drinking water, launching ramp with low elevation at 3042 (usable 3 to 5 days after drawdown begins) with handling dock, and parking for 15 vehicles with trailers and 37 autos.

8. Visitor Use - Swimming, picnicking, boat launching, boating, and sightseeing.

9. Archaeological-Historical Resources - Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

Positive - The only intensive recreation area on the lake where large ponderosa pines exist.

(4) Influencing and Constraining Factors.

Due to steep topography, there is no area to increase the parking or day-use areas. The lands surrounding Robie Creek are private, and future development may create potential visual impacts that can be viewed from Robie Creek Management Unit. A store was built on private land next to the project boundary and a parking lot. At this time, there are no conflicts in regard to parking. The store owner/operator assists in providing informal surveillance. The management unit is used for formal group picnics and activities.

(5) Resource Objectives.

(a) Objectives.

1. CONTINUE TO MAINTAIN INTENSIVE DAY-USE RECREATION AREA WITH EMPHASIS ON SWIMMING, DAY USE, AND BOATING.

2. Ensure visitor safety.

3. Improve food source for young upland game birds.

(b) Rationale.

1. Robie Creek offers the only Corps-operated picnic and swimming sites on the lake which have vehicular access. The excellent swimming beach, native pines, and the enclosed landform are aesthetic attributes which draw visitors to the site. The site receives use by formal groups as well as individuals. The facilities help meet the regional recreational needs within the Lucky Peak PSMA. The site is extremely popular and receives heavy use; however, there is not enough parking at the boat launching ramp.

2. The lack of adequate parking and the location of the boat launching ramp on a curve are safety problems which need correcting. The safety problem of the launching ramp being located along a curve in the county road was temporarily solved by the placement of 28 concrete traffic barriers. However, the 30-foot entrance is located along the curve of Robie Creek Road.

3. Steep topography precludes the establishment of food plots to provide food for young upland game birds and other wildlife. Game-bird feeders are an alternate way to provide food for and to attract wildlife which can be enjoyed by recreationists.

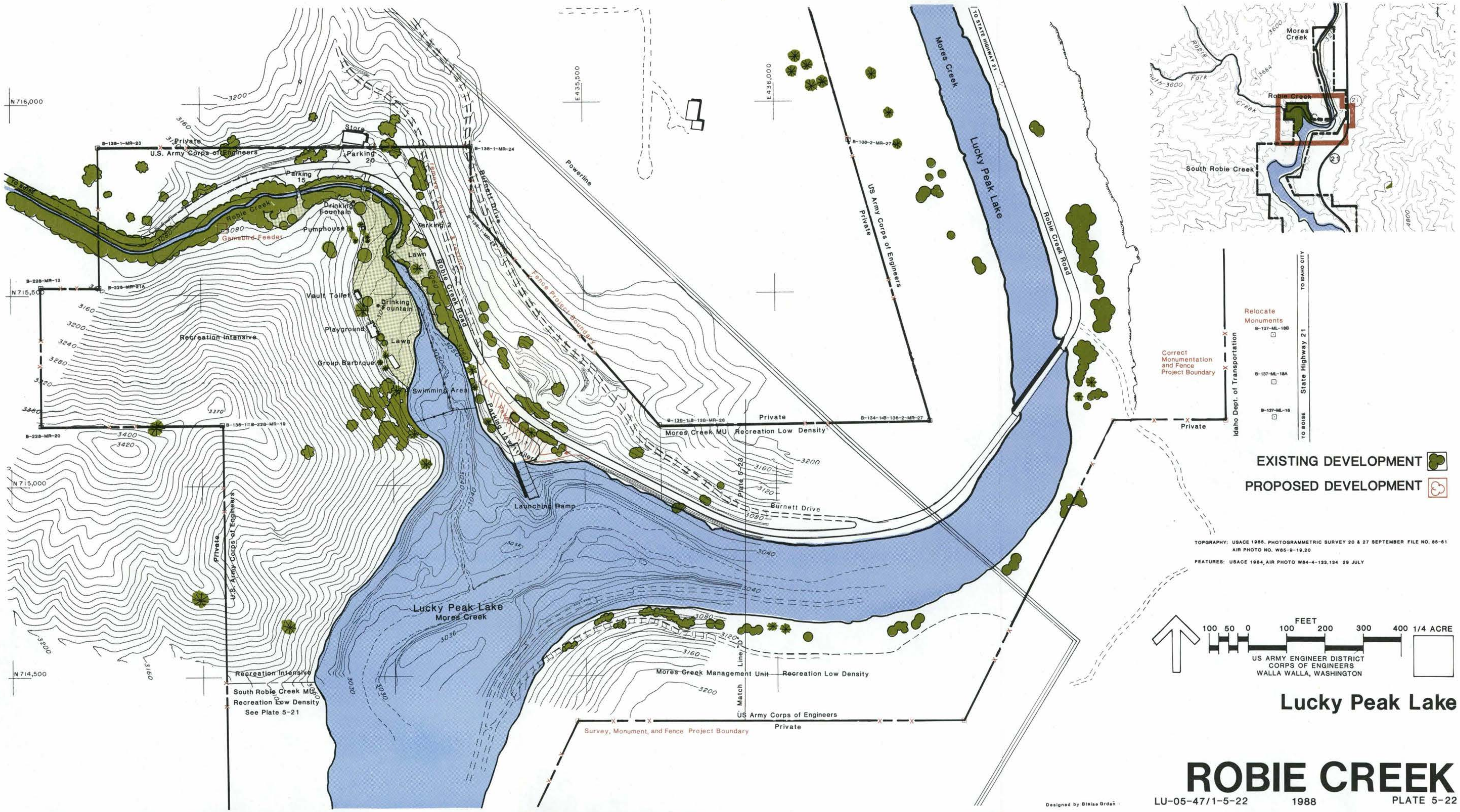
(6) Development and Management Concepts.

(a) Refer to Plate 5-22 for conceptual development plan for Robie Creek.

(b) Correct safety problem at the entrance of the boat launching and parking area as shown on Plate 5-22.

(c) Provide group shelter.

(d) Install upland game-bird feeder.


Robie Creek
Gamebird Feeder
Store
Private
U.S. Army Corps of Engineers
Parking 20
Parking 15
Parking 2
Drinking Fountain
Pumphouse
Lawn
Vault Toilet
Playground
Group Barbeque
Swimming Area
Recreation Intensive
Robie Creek Road
Burnett Drive
Powerline
Fence Project Boundary
Launching Ramp
Mores Creek MU
Recreation Low Density
US Army Corps of Engineers
Mores Creek
Lucky Peak Lake
TO STATE HIGHWAY 21
Lucky Peak Lake
Mores Creek
Mores Creek Management Unit
South Robie Creek MU
See Plate 5-21
Survey, Monument, and Fence Project Boundary
Match Line
Plate 5-23
Correct Monumentation and Fence Project Boundary
Relocate Monuments
Idaho Dept. of Transportation
State Highway 21
TO IDAHO CITY
TO BOISE
South Robie Creek
EXISTING DEVELOPMENT
PROPOSED DEVELOPMENT
TOPOGRAPHY: USACE 1985, PHOTOGRAMMETRIC SURVEY 20 & 27 SEPTEMBER FILE NO. 85-61 AIR PHOTO NO. W85-9-19,20
FEATURES: USACE 1984 AIR PHOTO W84-4-133,134 29 JULY
FEET
100 50 0 100 200 300 400
1/4 ACRE
US ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WALLA WALLA, WASHINGTON
Lucky Peak Lake
ROBIE CREEK
LU-05-47/1-5-22
1988
PLATE 5-22
Designed by Blaise Grden

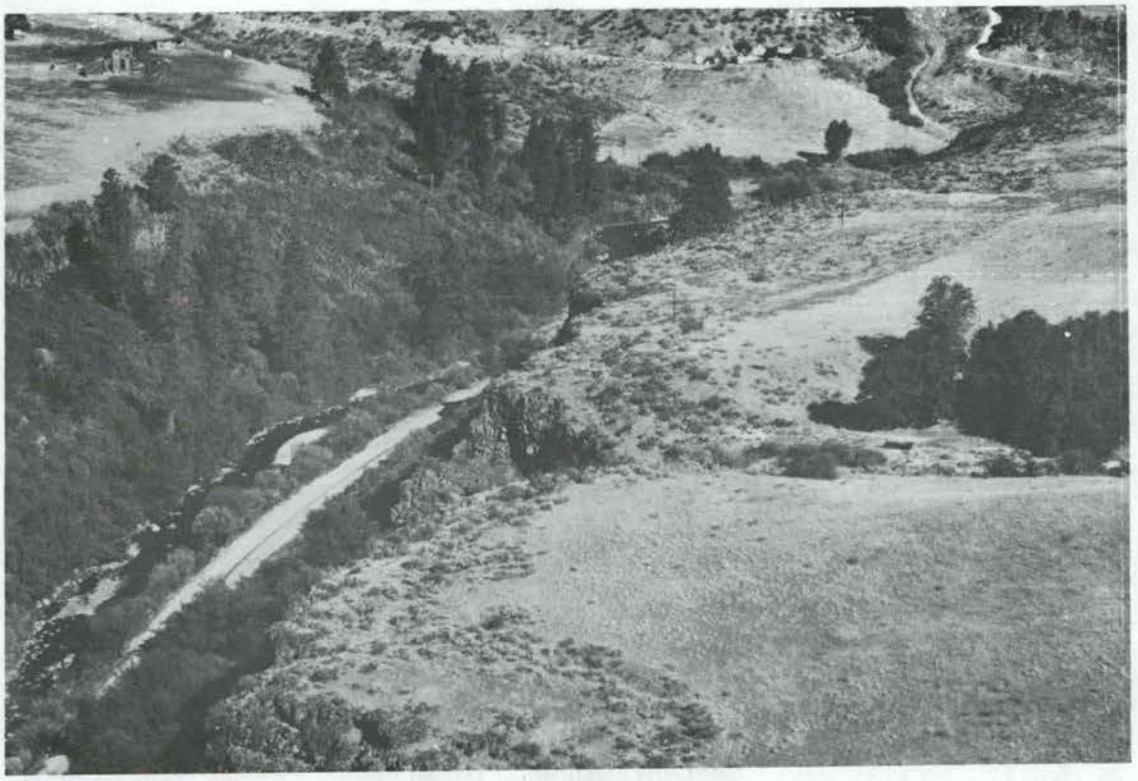


PHOTO 5-29. Mores Creek Management Unit.

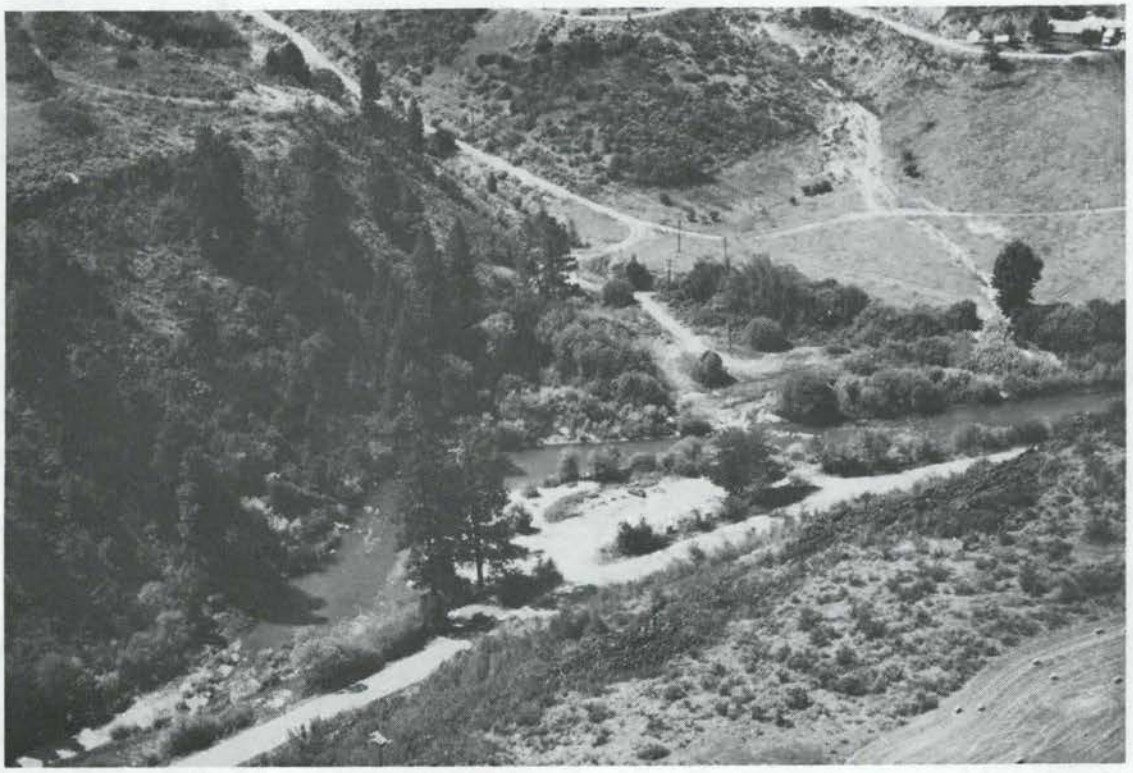


PHOTO 5-30. Mores Creek Picnic Area.

t. Mores Creek Management Unit.

(1) Land Use Classification - Recreation Low Density.

(2) Acres - 123.1.

(3) Unit Description.

(a) Ecological Factors.

1. Landform - Narrow creek canyon.

2. Orientation - East and west.

3. Percent of Slope - 0-25 percent.

4. Soils - Brownlee-Van Dussen complex, 2- to 20-percent slopes (105-4), and Basalt Supkin undifferentiated, 50- to 80-percent slopes (135-1).

5. Vegetation - Rocky Mountain maple, mountain alder, water birch, red-osier dogwood, Douglas hawthorn, ponderosa pine, black cottonwood, sandbar willow, whiplash willow, willows, Saskatoon serviceberry, mountain balm, mallow ninebark, common chokecherry, antelope bitterbrush, cascara, golden currant, squaw currant, Wood's rose, black raspberry, thimbleberry, blue elderberry, and common snowberry.

6. Water Resources - Mores Creek and Lucky Peak Lake.

7. Wildlife Resources - Golden and bald eagles and songbirds.

(b) Cultural Factors.

1. Access - State Highway 21 and Robie Creek County Road (paved).

2. Utilities - None; however, electricity and telephone available.

3. Land Ownership/Management - USA/USACE.

4. Outgrants - Ranch Water User's Association, 76-20, pump plant and pipeline, easement; Jones, Don L., 76-35, pump plant and pipeline, easement; and County of Boise, 65-50, Arrowrock and Robie Creek Road, easement.

5. Adjacent Management Units - Robie Creek and IDFG North.

6. Adjacent Ownership Outside Project - Private.

7. Existing Developments - 2 picnic tables, vault toilet, and parking for 10 autos.

8. Visitor Use - Picnicking, fishing, and sightseeing.

9. Archaeological-Historical Resources - Location of stagecoach route toll road (1860's) between city of Boise and Idaho City. Also, refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

Mores Creek (partially free-flowing), steep basalt cliffs, and native vegetation (especially the large ponderosa pines).

(4) Influencing and Constraining Factors.

(a) Positive - Very little area for development except along Mores Creek picnic area.

(b) Negative - Uncontrolled automobile access in picnic area causing loss of understory vegetation.

(5) Resource Objectives.

(a) Objectives.

1. MAINTAIN THE AREA AS LOW-DENSITY RECREATION AREA WITH THE EMPHASIS ON DAY USE.

2. Protect lands from encroachments.

(b) Rationale.

1. The unit has excellent road access and provides excellent picnic opportunities. Also, the area offers recreation opportunities when Lucky Peak Lake is drawn down because a portion of Mores Creek within the management unit is above the lake level. At the present time, cars can pull up to the creek causing soil compaction under trees and vegetation loss. In addition to vegetation damage there is a negative visual impact in the area. Mores Creek helps meet the regional needs of Lucky Peak PSMA and serve as a buffer to protect the recreation experience and visual quality from the lake.

2. Due to the close proximity to private lands, encroachments have been a problem. Monumenting and fencing would serve to eliminate encroachments.

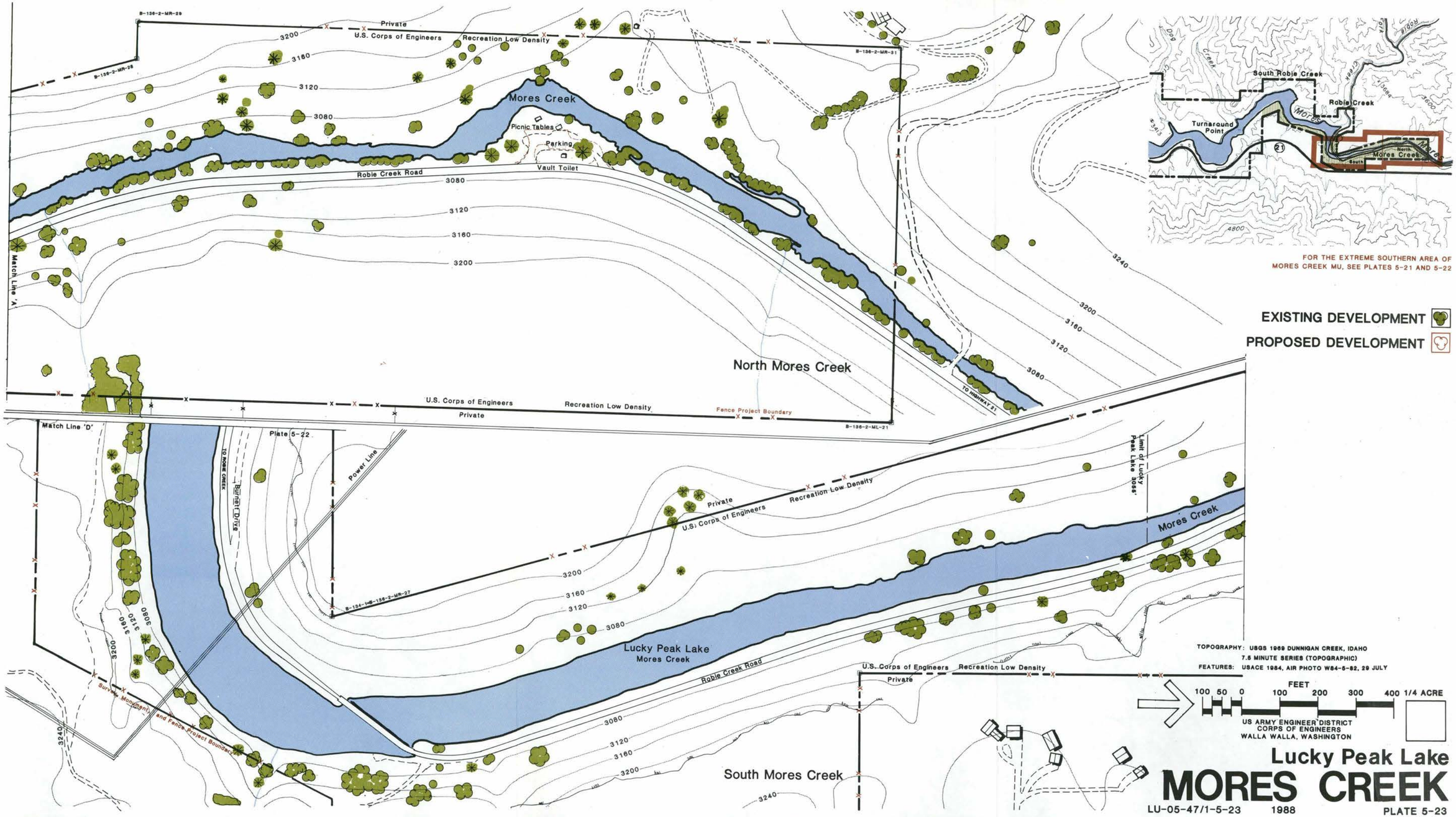
(6) Development and Management Concepts.

(a) Refer to Plate 5-23 for conceptual development plan for Mores Creek. See Plates 5-21 and 5-22 for the areas of Mores Creek Management Unit which are across from Robie Creek South and Robie Creek.

(b) Improve small site along Mores Creek for picnic area/parking area (confine auto access).

(c) Replace existing toilet.

(d) Survey, monument, and fence project boundary and correct monumentation along Highway 21.



Lucky Peak Lake

MORES CREEK

LU-05-47/1-5-23 1988 PLATE 5-23

5.04. WILDLIFE SITES.

a. General.

(1) Wildlife habitat management on Lucky Peak project lands is accomplished by both IDFG and the Corps. Approximately 2,058 acres of project lands are licensed to IDFG, while the remaining lands classified as "wildlife" and the intensive and low-density recreation lands are presently managed by the Corps with the exception of Sandy Point and Spring Shores which are managed by IDPR as units of LPSP. The number of acres managed by both agencies will change pending the outcome of proposed land interchange with the USFS and the revision of the license with IDFG. IDFG licensed lands are divided into three management units: IDFG West, IDFG East, and IDFG North.

(2) Units managed by the Corps are integrated with the recreation management units. Wildlife developments on recreation units will be managed so as to not adversely affect the ability of the units to provide recreation objectives. These lands will be managed primarily to protect and maintain mule deer winter range and to provide habitat for upland game birds and nongame species. See Table 5-1 for wildlife developments planned for lands classified "Recreation." Plates 5-1 through 5-23 indicate the approximate location of the development on each site.

WILDLIFE
Management Units

TABLE 5-1

WILDLIFE HABITAT DEVELOPMENTS PLANNED FOR RECREATION SITES
AT LUCKY PEAK PROJECT

Site	Developments			
	Nest Boxes	Game-Bird Feeder	Tree/Shrub Planting	Perennial Food Development
Lydle Gulch	X			
Sheep Creek	X			
Pipeline Gulch			X	
Deer Flat	X			
Charcoal South	X	X		
Birch Creek		X	X	
Chimney Rock			X	X
Browns Gulch	X	X		
Macks Creek		X		
Dead Dog Creek		X		
South Robie Creek			X	
Robie Creek		X		

PHOTO 5-31. Bitterbrush planting in IDFG West Management Unit.

b. IDFG West Management Unit.

(1) Land Use Classification - Wildlife.

(2) Acres - 1,101.0
(includes 31.0 acres of USFS interchange lands).

(3) Unit Description.

(a) Ecological Factors - This unit is comprised of lands on the west shore of the lake and Mores Creek Arm.

1. Landform - Basalt cliffs, gently sloping benches, steep hillsides, and talus slopes.

2. Percent of Slope - 15 percent to vertical cliffs.

3. Soils - See Plate 3-2, Soils, in TA - Volume 2.

4. Vegetation - Native grasses and forbs, bitterbrush, and rose.

5. Water Resources - Boise River, Dead Dog Creek, Deer Creek, and Mores Creek.

6. Wildlife Resources - Mule deer, California quail, chukar, bald and golden eagles, and nongame birds.

(b) Cultural Factors.

1. Access - Highway 21, Deer Creek Road, Firebreak Road, and Lucky Peak Lake.

2. Utilities - None.

3. Land Ownership/Management - USA/USACE and USFS.

4. Outgrants - IDFG license 83-10; Developers International 68-26; USFS 62-257; Highland Livestock Company 104-2, 104-13, and 69-75. See Plate 3-9 in TA.

5. Adjacent Management Units - Sheep Creek, Deer Flat, Goose Neck Bay, Quarry, Dead Dog Creek, Turnaround Point, and Robie Creek South.

6. Adjacent Ownership/Management Outside Project - USA/USBLM, USA/USFS, IDFG, and Private. See Plate 3-6 in TA - Volume 2.

7. Existing Developments - 3 bitterbrush plantings, 2 alfalfa/wheat plantings, 2 spring developments, 3 raptor perching/nesting structures, and nest box route with 20 nest boxes (Plate 5-24).

8. Visitor Use - Hunting, bird watching, hiking, and sightseeing.

9. Archaeological-Historical Resources - Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

1. Positive - Undeveloped character and excellent vistas.

2. Negative - Straight rows of bitterbrush plantings.

(4) Influencing and Constraining Factors.

Steep slopes, erodible soils, and lack of moisture will continue to constrain the type and amount of habitat development that can be accomplished on these lands.

(5) Resource Objectives.

(a) Objectives.

1. PROTECT AND MANAGE THE UNIT FOR MULE DEER WINTER RANGE.

2. Manage the unit for upland game-bird habitat.

3. Manage the unit for watershed protection.

4. Manage the unit to provide wildlife-based recreation.

5. Manage bitterbrush plantings to improve and protect the visual quality of the unit.

(b) Rationale.

1. The lands surrounding Lucky Peak Lake are part of the winter range for the most important mule deer herd in Idaho in terms of hunter activity and number of deer harvested. Private lands in the area are being converted from farmland and rangeland into residential property, thereby eliminating land suitable for use by wintering mule deer. As mule deer winter range on surrounding lands becomes more scarce, the Lucky Peak project lands will become more important for wintering mule deer.

2. Lucky Peak project lands support several species of upland game birds which provide recreation for numerous hunters annually. Managing for upland game-bird habitat will help maintain bird populations which will continue to provide recreational opportunities for hunters.

3. Watershed protection is necessary to prevent soil erosion and chemical runoff from contaminating the Boise River and its tributaries and causing harmful effects on the aquatic environment.

4. In addition to providing hunting opportunities, Lucky Peak project lands provide other types of wildlife-based recreation such as bird watching, eagle viewing, and wintering deer viewing. The ability to provide such recreational opportunities so close to a major metropolitan center is an asset to the Boise area.

5. The bitterbrush has been planted in straight rows and is visually noticeable in a generally natural appearing landscape during the recreation season. Also see project RO Number 12 in Section 3.

(6) Development and Management Concepts.

Refer to Plate 5-24 which follows page 5-116 for conceptual development plan for IDFG West Management Unit. The lands on the west shore are managed as part of the Boise River Wildlife Management Area under a Coordinated Resources Management Plan (CRMP) dated December 1984. The CRMP is a cooperative effort between Federal and state agencies and private landowners to manage the area primarily for mule deer winter range and for upland game-bird habitat, watershed protection, and wildlife-based recreation. Management is accomplished mostly via a rest-rotation cattle grazing program, revegetation programs, and water developments. The licensed lands on the west shore are included in two of the rest-rotation pastures, Low Pasture 4 and High Pasture 4 (Plate 5-24). These pastures are grazed every other year to prune bitterbrush plants and remove competing grasses and forbs to stimulate new growth of bitterbrush, grasses, and forbs. As part of the revegetation program, IDFG has established bitterbrush plantings and alfalfa/wheat plantings on the west shore of the reservoir to provide forage for mule deer. IDFG also plans to rehabilitate a burn area at Deer Flat by seeding rangeland grasses. To provide water for cattle and wildlife, IDFG has installed three spring developments in the Dead Dog Creek/Deer Creek area. To provide additional cover for quail, IDFG plans to install several elevated quail roosts. In addition to the two sites shown on Plate 5-24, additional sites have yet to be identified by IDFG. IDFG has also installed some developments on the west shore for raptors and nongame birds. IDFG has installed three raptor perching/nesting structures in the Sheep Creek/Deer Flat area and plans to install more in the Lucky Peak Nursery area. IDFG has also established a nest box route of 20 nest boxes along Deer Creek Road to provide nesting habitat for cavity-nesting birds such as wrens, tree swallows, and bluebirds.

PHOTO 5-32. Upper end of Lucky Peak Lake just below Arrowrock Dam. The IDFG East Management Unit is on the left of the photo and the IDFG North Management Unit is on the right side of the photo.

c. IDFG East Management Unit.

(1) Land Use Classification - Wildlife.

(2) Acres - 1,222.5 (includes 105.8 acres of USFS interchange lands).

(3) Unit Description.

(a) Ecological Factors - This unit is comprised of lands along the east shore of the lake.

1. Landform - Basalt cliffs, steep hillsides, and talus cliffs.

2. Percent of Slope - 15 percent to vertical cliffs.

3. Soils - See Plate 3-2, Soils, in TA - Volume 2.

4. Vegetation - Native grasses and forbs, black cottonwood, and rose.

5. Water Resources - Boise River and Charcoal Creek.

6. Wildlife Resources - Mule deer, chukar, California quail, raptors, and nongame birds.

(b) Cultural Factors.

1. Access - Lucky Peak Lake.

2. Utilities - None.

3. Land Ownership/Management - USA/USACE and USFS.

4. Outgrants - IDFG, 83-10. See Plate 3-9 in TA for location of outgrants.

5. Adjacent Management Units - Lydle Gulch, Barclay Bay-Turner Gulch, Pipeline Gulch, Charcoal, Placer Point, Birch Creek, Chimney Rock, and Browns Gulch.

6. Adjacent Ownership/Management Outside Project - USA/USBLM, IDFG, and private, (see Plate 3-6 in the TA - Volume 2.

7. Existing Developments - None.

8. Visitor Use - Hunting, bird watching, hiking, and sightseeing.

9. Archaeological-Historical Resources - Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

Steep topography, low vegetation, and rock outcrops.

(4) Influencing and Constraining Factors.

Steep slopes, erodible soils, and lack of moisture will continue to constrain the type and amount of habitat development that can be accomplished in this unit.

(5) Resource Objectives.

(a) Objectives.

1. PROTECT AND MANAGE THE UNIT FOR MULE DEER WINTER RANGE.

2. Manage habitat for upland game birds.

3. Manage habitat for nongame species.

(b) Rationale.

1. The lands surrounding Lucky Peak Lake are part of the winter range for the most important mule deer herd in Idaho in terms of hunter activity and number of deer harvested. Private lands in the area are being converted from farmland and rangeland into residential property, thereby eliminating land suitable for use by wintering mule deer. As mule deer winter range on surrounding lands becomes more scarce, the Lucky Peak project lands will become more important for wintering mule deer.

2. Lucky Peak project lands support several species of upland game birds which provide recreation for numerous hunters annually. Managing for upland game-bird habitat will help maintain bird populations which will continue to provide recreational opportunities for hunters.

3. Lucky Peak project lands provide habitat for a variety of nongame wildlife species. These species are an integral part of the natural environment and provide enjoyment for many recreationists who are hiking, sightseeing, bird watching, or wildlife viewing.

(6) Development and Management Concepts.

Refer to Plate 5-24 which follows page 5-116 for conceptual plan for IDFG East Management Unit. Licensed lands on the east shore of Lucky Peak Lake are not currently managed as part of a management area. IDFG is currently putting together a management plan similar to the CRMP to guide wildlife management on lands east of the lake. Once this plan is finalized, IDFG management of east shore project lands will follow the guidelines of the plan. To date, IDFG has not installed any developments on these project lands. Morrison-Knudsen has submitted a proposal to create a 0.3-acre wetland as required by the USACE for the replacement of wetlands disturbed by hydroelectric power facility construction activities at Lucky Peak Dam. The replacement wetland will be located in Lydle Gulch on land licensed to IDFG or proposed for inclusion in the license. Both the USACE and IDFG have approved the concept of the preliminary design which calls for building small check structures to hold back runoff and create ponds. The final design was approved in 1987 and construction of the structures should be completed in the summer of 1988.

d. IDFG North Management Unit.

(1) Land Use Classification - Wildlife.

(2) Acres - 540.9
(includes 132.6 acres of USFS interchange lands).

(3) Unit Description.

(a) Ecological Factors - This unit is comprised of lands along the east bank of Mores Creek Arm and the north shore of the main reservoir.

1. Landform - Steep slopes and talus slopes.

2. Percent of Slope - 15 percent to vertical cliffs.

3. Soils - See Plate 3-2, Soils, in TA - Volume 2.

4. Vegetation - Native grasses and forbs, bitterbrush, and sagebrush.

5. Water Resources - Boise River and Mores Creek.

6. Wildlife Resources - Mule deer, chukar, California quail, raptors, and nongame birds.

(b) Cultural Factors.

1. Access - Highway 21, Arrowrock Road.

2. Utilities - None.

3. Land Ownership - USACE and USFS (interchange lands).

4. Outgrants - IDFG, 83-10; Ada County, 104-12; Boise County, 65-50; Idaho Power Company, 104-10; and U.S. Department of Interior, 63-198. See Plate 3-9 in TA - Volume 2.

5. Adjacent Management Units - Spring Shores and Macks Creek.

6. Adjacent Ownership Outside Project - IDFG, IDOL, USFS, and private. See Plate 3-6 in TA.

7. Existing Developments - Bitterbrush plantings, fences, and a grazing exclosure (Plate 5-24).

8. Visitor Use - Hunting, hiking, and sightseeing.

9. Archaeological-Historical Resources - Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

Steep slopes and basalt cliffs along Mores Creek.

(4) Influencing and Constraining Factors.

Development of wildlife habitat will continue to be constrained by the steep slopes, erodible soils, and lack of moisture.

(5) Resource Objectives.

(a) Objectives.

1. PROTECT AND MANAGE THE UNIT FOR MULE DEER WINTER RANGE.

2. Manage the unit for upland game-bird habitat.

3. Manage the unit for nongame species habitat.

(b) Rationale.

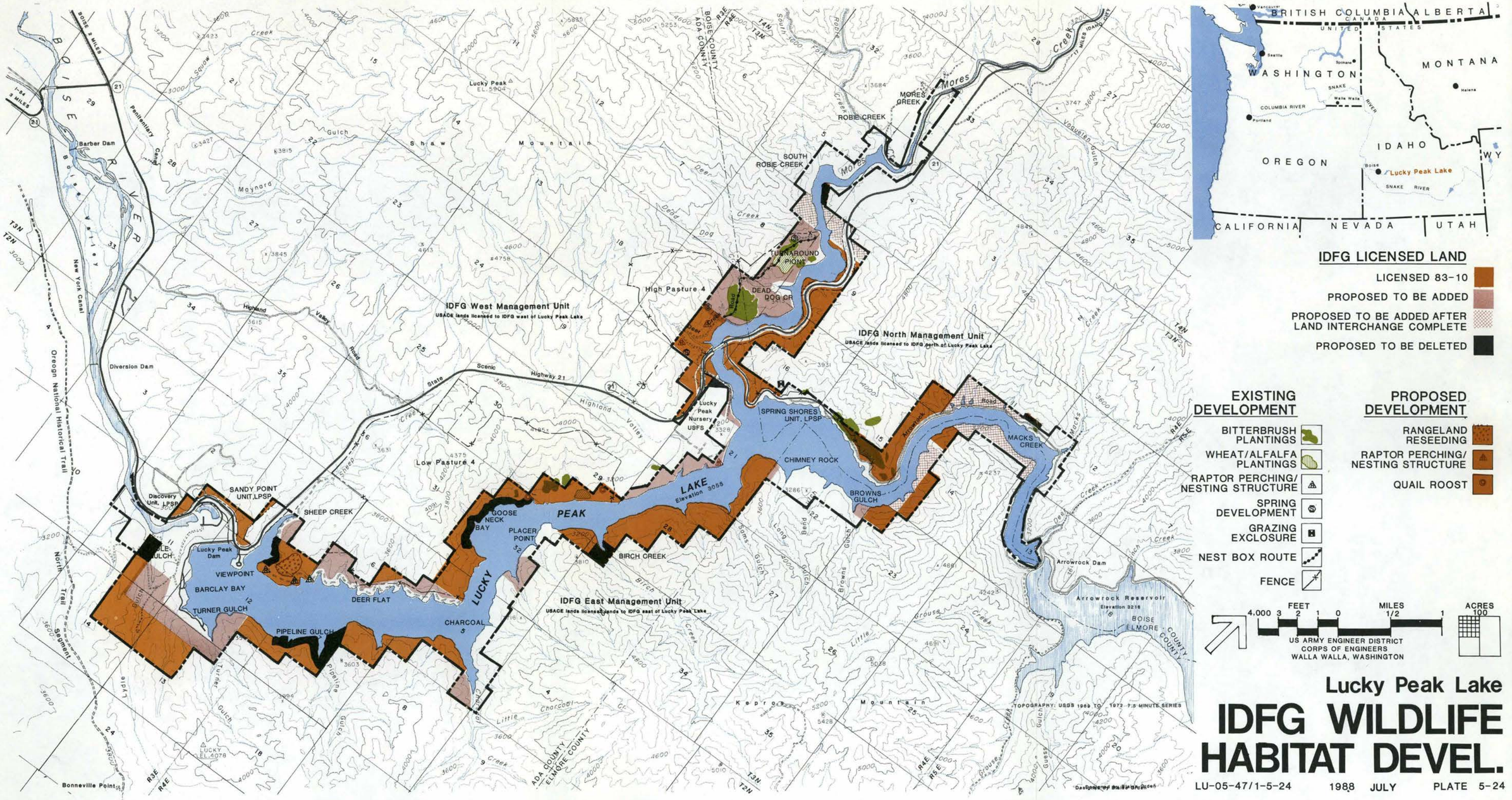
1. The lands surrounding Lucky Peak Lake are part of the winter range for the most important mule deer herd in Idaho in terms of hunter activity and number of deer harvested. Private lands in the area are being converted from farmland and rangeland into residential property, thereby eliminating land suitable for use by wintering mule deer. As mule deer winter range on surrounding lands becomes more scarce, the Lucky Peak project lands will become more important for wintering mule deer.

2. Lucky Peak project lands support several species of upland game birds which provide recreation for numerous hunters annually. Managing for upland game-bird habitat will help maintain bird populations which will continue to provide recreational opportunities for hunters.

3. Lucky Peak project lands provide habitat for a variety of nongame wildlife species. These species are an integral part of the natural environment and provide enjoyment for many recreationists who are hiking, sightseeing, bird watching, or wildlife viewing.

(6) Development and Management Concepts.

Refer to Plate 5-24 for conceptual development plan for IDFG North Management Unit. Licensed lands along the east bank of Mores Creek and the north shore of the main reservoir are part of what IDFG currently considers a "no management" area. The area is no longer used for cattle grazing, primarily because the steep terrain makes fencing for livestock control very difficult and expensive. A grazing exclosure established on the area demonstrated the tendency of the ungrazed vegetation to return to a climax stage, which is not necessarily of greater benefit to mule deer than a successional stage of vegetation. In the future, IDFG may use this area as an alternate route for the movement of sheep from pasture north of Lucky Peak Lake to low pasture on the west shore of the lake. The brief use by the sheep will help set back the successional stage of the vegetation for the benefit of mule deer.



Lucky Peak Lake

IDFG WILDLIFE HABITAT DEVEL.

LU-05-47/1-5-24 1988 JULY PLATE 5-24

PHOTO 5-33. Ice Fishing on Lucky Peak Lake.

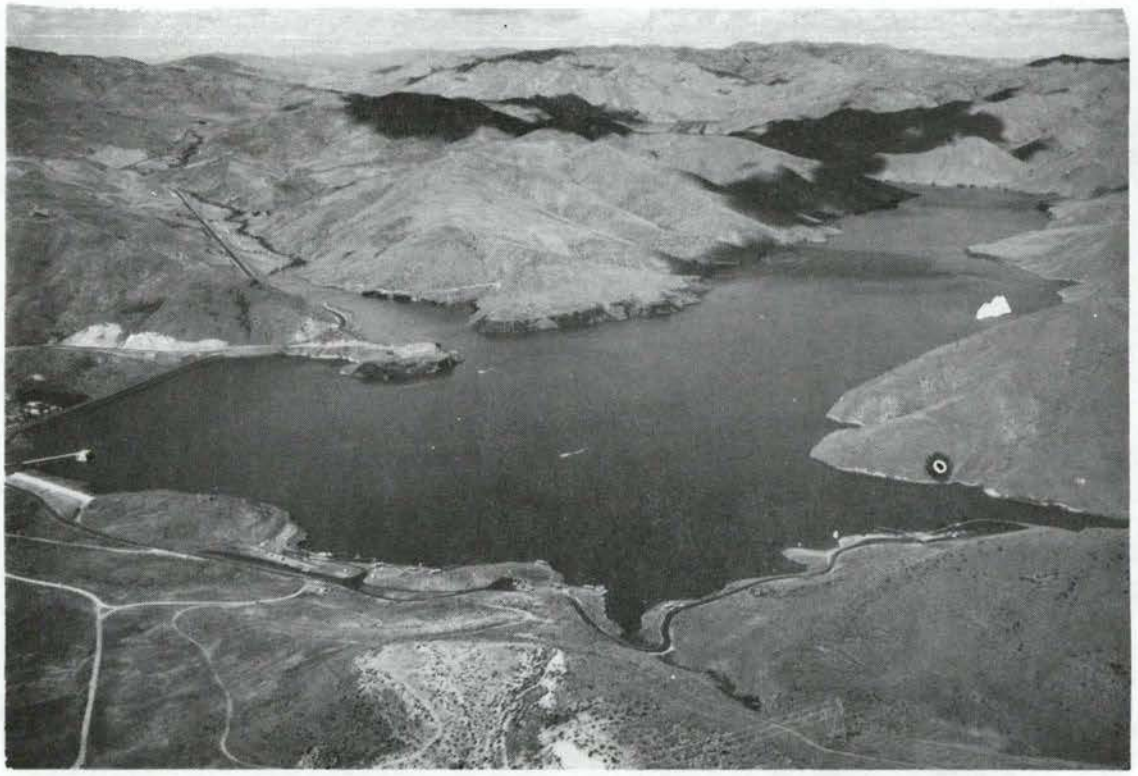


PHOTO 5-34. Lucky Peak Lake Management Unit.

e. Lucky Peak Lake Management Unit.

(1) Land Use Classification - Under current regulations, land covered by the lake is not given a classification.

(2) Acres - 3,019.1 surface acres at normal full pool.

(3) Unit Description.

(a) Ecological Factors.

1. Landform - Flat beaches to steep vertical cliffs.

2. Orientation - Not applicable.

3. Percent of Slope - 0-5 percent to vertical cliffs.

4. Soils - Not surveyed.

5. Vegetation - Native vegetation along shoreline: willow and alder; planted: locust.

6. Water Resources - Boise River, Mores Creek, Charcoal Creek, and Birch Creek. Lake fluctuates between elevations 2905 and 3060.

7. Fishery Resources - Rainbow trout, kokanee, and smallmouth bass.

(b) Cultural Factors.

1. Access - State Highway 21, project access roads, launching ramps, and water access.

2. Utilities - Not applicable.

3. Land Ownership/Management - USA/USACE and IDOL (old Boise riverbed).

4. Outgrants - Ada County 85-2, easement expires 10 October 1989 (for docks and facilities). IDPR 67-41, lease, expires 7 May 2002 (land between old Boise riverbed and Spring Shores Management Unit).

5. Adjacent Management Units - All units of the project.

6. Adjacent Ownership Outside Project - See other management units or land ownership map in Plate 3-6, TA - Volume 2.

7. Existing Developments - Launching ramps, marina docks, and ski tie-up docks.

8. Visitor Use - Fishing, boating, and water skiing.

9. Archaeological-Historical Resources - Old placer mines: Rough and Ready No. 2, Rough and Ready, Macks Creek, Sunflower, May, Shinney Bar, Mayflower, Homestake, and Pinto Placer. Refer to USACE, Walla Walla District Cultural Resource Management Plan.

(c) Aesthetic Factors.

1. Positive - When Lucky Peak Lake is at normal full elevation 3055, the lake has high scenic quality. The steep mountain slopes, rock outcrops, cliffs, and distance views from the lake in contrast to the planimetric aspect of the lake contribute to that quality.

2. Negative. As the lake drops below normal full elevation, mud slopes are exposed creating a bathtub ring appearance.

(4) Influencing and Constraining Factors.

(a) Because the lake's primary purpose is flood control the lake fluctuates between elevations 2905 and 3055. The lake level is determined by seasonal runoff. It is operated according to the Memorandum of Agreement and Manual for Flood Control Operation of Boise River Reservoirs as developed and agreed to by the USACE and USBR.

(b) Due to flood control and irrigation requirements, the lake is at normal full pool elevation 3055 usually during the recreation season, 15 June through Labor Day. However, during drought years the lake may never reach full pool, and during heavy runoff years the lake level will be held below full pool until July to accommodate floodwaters.

(c) Steep slopes and the annual drawdown of the lake level make the establishment of shoreline vegetative cover difficult.

(d) The lack of suitable spawning habitat for salmonids prevents these species from maintaining viable populations in the lake.

(5) Resource Objectives.

(a) Objectives.

1. MANAGE LAKE LEVELS TO PROVIDE AUTHORIZED PURPOSES: FLOOD CONTROL (PRIMARY), IRRIGATION, AND POWER DEVELOPMENT, AND TO PROVIDE THE BENEFITS OF RECREATION AND FISH AND WILDLIFE.

2. Provide for water-oriented recreation opportunities.

3. Hold water elevation of lake steady at 3055 during the recreation season as long as possible.

4. Manage for hatchery-raised rainbow trout and smallmouth bass fishery to supplement kokanee.

5. Manage for wildlife values.

(b) Rationale.

1. Lucky Peak Lake is authorized as a flood control project which is the first priority in operation of the project.

2. Lucky Peak Lake is the primary recreation opportunity on the project.

3. The stability of Lucky Peak Lake allows full utilization of recreation facilities, such as boat launching ramp and swimming, and provides an aesthetically pleasing, natural appearance of the lake.

4. The USBR has an Idaho State water storage permit for Lucky Peak Lake storage space. The storage space has been allocated to irrigation, streamflow maintenance, dead or inactive storage, and flood control surcharge. Lucky Peak Lake is one of the three major Boise River storage reservoirs. Lucky Peak is operated as part of the Boise reservoir system. Under system operation, water belonging to Arrowrock Reservoir and/or Anderson Ranch (the other two reservoirs in the system) irrigation waterholders is transferred to and stored in Lucky Peak during the summer recreation season to help keep Lucky Peak Lake water surface elevation near full pool level of 3055.

5. Lucky Peak Lake is a popular fishing place for many people in the surrounding area. To maintain game-fish populations to meet public demand, the IDFG manages the lake primarily by stocking it with two major species--kokanee and rainbow trout. IDFG has also introduced smallmouth bass to the lake to provide additional fishing opportunities for the public.

(6) Development and Management Concepts.

(a) Continue to provide for a 3055 elevation recreation pool as prescribed under the Water Control Manual, Boise River Reservoirs, Boise, Idaho, 1985.

(b) IDFG manages Lucky Peak Lake for three species of game fish: rainbow trout, kokanee, and smallmouth bass. IDFG stocks approximately 125,000 to 250,000 trout and 500,000 fingerling kokanee annually. The IDFG stocked the lake with smallmouth bass in the mid-1970's but has not restocked this species since then. The IDFG stocks trout and kokanee in order to maintain a viable fishery. Suitable spawning habitat for these species does not exist in the lake, and the lack of fish passage facilities at both Lucky Peak and Arrowrock Dams prevents movement of fish into and out of the lake. Smallmouth bass are able to use the existing rocky shoreline areas for spawning and have been maintaining their population.

(c) At present, IDFG does not have plans to install fish habitat developments or change management strategies in the lake. However, in the future, IDFG may plant willows in cove areas to provide shoreline cover for fish. The IDFG may also set up an egg-taking station at the mouth of Mores Creek to catch kokanee swimming up the creek to attempt to spawn. IDFG would remove eggs from the kokanee at the station, raise them at a hatchery, and return the fingerlings to the lake.

6

DESIGN CRITERIA

SECTION 6 - DESIGN CRITERIA

SECTION 6 - DESIGN CRITERIA

6.01. GENERAL.

Design principles and criteria particularly appropriate to the Lucky Peak project are discussed in the following paragraphs.

6.02. POLICIES AND PROCEDURES PUBLICATIONS.

a. General policies and procedures for planning, design, operation, and maintenance of recreation facilities at USACE Civil Works projects are given in engineer manuals (EM), engineer regulations (ER), and engineer pamphlets (EP) referenced below:

EM 1110-2-400	Recreation Planning and Design Criteria.
ER 1110-2-400	Design of Recreation Sites, Areas, and Facilities.
ER 1110-2-102	Design Features to Make Building and Facilities Accessible to and Usable by the Physically Handicapped.
ER 1120-2-400	Recreation Resources Planning.
ER 1130-2-400	Recreation-Resource Management of Civil Works Water Resource Projects.
ER 1165-2-400	Recreational Planning, Development, and Management Policies.
EP 310-1-6	Graphic Standards Manual.
EP 310-1-6a and b	Sign Standards Manual.

b. These publications guide the development of recreational facilities to assure they are of the highest quality while serving the health, safety, and enjoyment of the visiting public.

6.03. SITING.

a. Development should be sensitive to the natural landscape character of the site. The landscape identity of each site and its natural factors should be fully appraised so the visual resources of the site and project will not be impacted.

b. Facilities should be sited and designed to blend with the landscape as well as be compatible with environmental conditions without calling attention to themselves. Only the most adaptable terrain will be used for siting of facilities. Cuts and fills are to be avoided.

6.04. ACCESS AND CIRCULATION.

a. General.

Park roads, trails, and walks play a major role in establishing the pace and character of a recreation area. Within project recreation sites, no road or other circulation system should be designed simply as a connecting link between points of interest. Every segment of recreation paths should relate to the environment through which it passes, constituting an enjoyable and informative experience in itself. Horizontal and vertical alignment should respect the terrain, lying lightly on the land. Existing roads which are not necessary for normal circulation and parking patterns should be replaced by natural landscape features.

b. Parking Areas.

Parking areas are an integral part of the circulation system. Large parking areas should be designed so the circulation is safe and the pattern is obvious. Their location in relation to buildings and recreation areas should be carefully considered. The approaching driver should have a view of the specific area he/she is visiting. Parking edges should be physically defined. Planting and naturalistic grading should be used to shade and screen parking areas and to reduce their apparent size. The type of material used for parking can include concrete, asphaltic concrete, gravel, decomposed granite, stabilized soil, or compacted earth surface shaped for drainage. The type of material used will be determined by amount of traffic and environmental conditions.

c. Walks and Trails.

Walks and designated pathways should be designed to provide convenient and safe pedestrian access and circulation between site facilities. This includes comfort stations, parking areas, and bath houses. Topography and vegetation should influence siting of walks. Special consideration should be given to providing handicapped access. Widths should be based on traffic volume. Natural materials should be used when feasible. However, where handicapped access is an objective, asphalt-surfaced paths can blend sensitively into natural edges and should be considered.

6.05. SITE PREPARATION.

a. General.

Detailed information on the site should be obtained before design starts. Vegetation to be preserved should be selected early in

the design phase. If manipulation of landscape is necessary it must always be in harmony with the essential character of the land. Structures and plant materials introduced and landforms that are modified should have the same general character as existing site elements.

b. Grading.

Grading for construction of park facilities should be minimized. Since grading involves alteration of the existing natural character of the site, it should be accomplished with a definite result in mind. Necessary cuts and fills should blend uniformly with existing natural contours. Their edges should be neatly finished to blend with the natural landform and vegetation. Careful consideration should be given to how and where excess material is to be used. Excess material may often be used to create landforms such as mounds or berms of earth to separate and screen areas. In irrigated areas plants native to the region which can thrive under irrigated conditions should be utilized.

6.06. LANDSCAPE PLANTING.

a. Native plant material should be used to enhance, suggest, or maintain the character of the natural landscape. In project areas where the natural environment has been altered considerably, such as Spring Shores or Sandy Point, non-native plants may be used that will blend with native plants in form, line, color, and texture.

b. Planting should emphasize natural landforms with groupings of trees and shrubs. It should be informal, avoiding street-like linear plantings.

6.07. PARK FURNITURE.

Ideally, design and materials of park furniture should reflect the character of the landscape on which it is placed. Lucky Peak project recreation sites are rural and are akin to a remote state or Forest Service park rather than a neighborhood or city park. Park furniture which contains some bulk generally blends easily in a natural setting, whether wooded or open. Heavy construction denotes stability and longevity and reflects the landscape character of central Idaho. Timber construction is preferable to concrete block, poured-in-place concrete, or aluminum. In timber construction of tables, bridges, shelters, and other park furniture, the use of material greater than 2 inches thick is strongly recommended. However, all aluminum picnic tables are used throughout the Walla Walla District. They are best suited for lawn areas because they are lightweight and easily moved for mowing and storage during the winter months. They are also resistant to vandalism and need little maintenance. However, they are not aesthetically as

pleasing as wooden picnic tables because of their color. Additionally, the surface reflects a high volume of light and is too bright. As new products are available which are not as bright and have better form, they should be purchased in lieu of the current models.

6.08. STRUCTURES.

a. General.

New structures should be carefully designed with consideration to natural elements, topography, climate, and circulation systems. The facilities should reflect the unique character of their site with a distinct quality and style. The natural elements include rock, soil, water, and plants which should be noted on design drawings. Topography involves contours, grading, and drainage of building sites. Climate considerations include site latitude, sun orientation, wind, snow, humidity, degree days, and microclimate. These elements of the site establish the background of architectural form, scale, and style.

b. Form.

The building will be sensitive to the site elements and landforms. A cultural association with past architectural styles of the local people should be included in design. It is important to establish human scale and a harmonious proportion to determine overall form. Mountainous landforms will be reflected in sloped roofs. Tall trees will be contrasted with horizontal building form. Overhangs and open plan systems to allow breezes to penetrate are a response to the climate. The building structure will be expressed as much as possible with open wood trusses and natural light will penetrate to the interior with the use of clerestory windows.

c. Materials.

Materials will harmonize with the natural environment and be applied consistently to all project structures.

d. Lighting.

Daylighting will be a design feature of all buildings. This will be established with clerestory windows, overhangs blocking only direct summer sun, and screens. Daylighting should replace the need for electric lights in park restrooms during the day. Minimum night lighting necessary for safety and security should be installed. Night lighting will be installed at all launching ramps. Photovoltaic (solar electric) systems will be installed for restrooms at recreation units which do not have electricity available.

e. Colors.

Colors will harmonize with the character of the project and the surrounding natural environment. It should be applied consistently to all appropriate project structures.

f. Existing Structures.

Existing structures at Spring Shores are a typical example of contrasting form and color within its landscape setting. Design of structures like these should be avoided. They draw too much attention to themselves.

6.09. ELECTRICAL DISTRIBUTION.

Powerlines at existing recreation sites are located above ground. These overhead lines can be safety hazards. The lines and poles can also detract from the visual quality of the landscape. Accordingly, it is now District policy to locate all electrical supply lines underground. As lines are replaced or when construction funds permit, existing powerlines shall be placed underground.

6.10. SIGNS.

a. Direction and control of visitors to and within public-use areas depends partly on a coherent and ordered signage system. Location of signs in each recreation area should be set in a fully coordinated sign plan. A sign plan helps eliminate unnecessary duplication and aids in placing signs where they will be effective. A sign inventory and plan for the Lucky Peak project was completed in 1980. This plan should be updated to reflect current conditions and proposed improvements.

b. Signs must communicate direction, information, and regulation messages effectively while remaining compatible with the surrounding environment. Federally adopted symbols used for both recreation and traffic control should be incorporated into the signage system. Project signs will be in accordance with the criteria prescribed in the USACE Sign Standards Manual and applicable regulations (EP 310-1-6a and b).

6.11. WASTE COLLECTION AND TREATMENT SYSTEMS.

a. Sewage collection and treatment systems are adequate to meet current and projected use at existing developed recreation areas. Expansion of public-use facilities at Spring Shores would probably exceed the capacity of the existing septic tank and leach field systems. However, a boat pumpout facility is needed at Spring Shores to help ensure the quality of water in Lucky Peak Lake.

b. The site should be surveyed to determine whether site conditions facilities should incorporate measures listed below to accommodate the elderly and the handicapped. Facilities designed will take into account the special needs of the elderly and the handicapped and will be built according to latest standards. They will accommodate various forms of handicap from nonambulatory, semiambulatory, sight disabilities, and hearing disabilities.

6.12. POTABLE WATER SYSTEMS.

a. Groundwater sources presently are utilized to provide potable water. Existing potable water systems will be maintained and upgraded as necessary and should provide an adequate potable water supply to meet foreseeable needs.

b. Potable water will be provided at Deer Flat in the future. No potable water system is anticipated for other sites. All applicable regulations governing potable water systems and water quality will be complied with.

6.13. FACILITIES FOR THE ELDERLY AND THE HANDICAPPED.

To the extent practical, existing and future public-use facilities should incorporate measures listed below to accommodate the elderly and the handicapped. Facilities designed will take into account the special needs of the elderly and the handicapped and will be built according to latest standards. They will accommodate various forms of handicap from nonambulatory, semiambulatory, sight disabilities, and hearing disabilities. Handicap features will conform to the Architectural Barriers Act.

a. Ramps or on-grade entrances for all visitor buildings.

b. Wheelchair ramps at appropriate and convenient locations where curbs border parking areas.

c. Benches for the elderly in shaded areas adjacent to major visitor parking facilities.

d. Restrooms and drinking fountains designated to accommodate use by handicapped individuals.

e. Path surfaces and widths which allow use by individuals confined to wheelchairs.

6.14. WILDLIFE HABITAT DEVELOPMENTS.

a. Tree/Shrub Plantings.

(1) Tree and shrub plantings will be established to provide nesting, hiding, roosting, and thermal cover, as well as food, for birds and mammals. Plantings will be established in areas that lack this type of cover or have insufficient quantity or quality of this type of cover, and in areas that have sufficient moisture available from the lake, creeks, or irrigation to support tree and shrub plantings.

(2) A typical tree and shrub planting will use potted seedlings in containers no smaller than 1 gallon, cuttings from existing cottonwoods and willows vegetation, or a combination of both. Species to be planted will be selected based on type of plant needed (tall tree, tall shrub, low shrub, etc.) and ability of the plant species to survive on the planting site. Native plant species will be used whenever possible. Trees and shrubs will be planted as close to a natural arrangement as possible, not in straight lines to protect the visual resource.

b. Perennial Food Development.

Perennial food developments provide a supplemental food source for young upland game birds as well as nongame birds and mammals. Food developments will be placed in areas that are suitable for cultivation, are accessible to farming equipment, and have sufficient moisture available either from natural sources or irrigation. Food developments will be planted with a perennial grain that produces a large seed crop and is adapted to the Lucky Peak project environment.

c. Nest Boxes.

(1) Nest boxes provide nest sites for cavity-nesting birds where suitable nest sites are lacking. Bird species expected to benefit from nest boxes include bluebirds, woodpeckers, wrens, swallows, owls, and kestrels.

(2) Nest boxes will be constructed of rough-cut lumber. Boxes will be constructed following specifications for each target bird species. Boxes will be mounted in trees or on poles where trees are lacking. Boxes will be mounted where they will receive minimum disturbance from recreationists.

d. Game-Bird Feeders.

(1) Game-bird feeders provide a supplemental food source for young upland game birds in late spring, summer, and early fall. A typical feeder consists of a hopper covered by an A-frame roof. Grain such as wheat or barley is loaded into the top of the hopper and is dispensed through an opening in the bottom of the hopper. The roof protects the hopper and the loose grain from the weather and provides cover for feeding birds.

(2) Feeders will be placed in brushy draws that provide cover for feeding birds. Feeders will be filled with grain several times from May through November, depending upon bird usage and availability of personnel to fill feeders.

6.15. REFERENCE.

USACE United States Army Corps of Engineers
1988 Sign Standards Manual EC 1130-2-200a and b
Washington, DC 20314-1000

7

SPECIAL PROBLEMS AND CONSTRAINTS

SECTION 7 - SPECIAL PROBLEMS AND CONSTRAINTS

SECTION 7 - SPECIAL PROBLEMS AND CONSTRAINTS

7.01. GENERAL.

This section addresses physical, biological, social, and institutional constraints that could impede accomplishing the RO's specified in Sections 3 and 5. It also recommends potential solutions to these problems.

7.02. SITE IMPROVEMENTS-COORDINATION.

a. Many additions and alterations to Lucky Peak recreation area facilities have been completed during the years since the project's initial construction. Some of these facilities improvements have been initiated and implemented by field personnel as part of the operations and maintenance program.

b. It is suggested resource managers call upon landscape architects, architects, recreation specialists, civil engineers, and other design professionals available within the Walla Walla District to make an onsite review of conditions, discuss alternatives, review plans, and make recommendations relating to operations and maintenance improvements. A brief and constructive review procedure should be implemented.

7.03. DEVELOPMENT OF NEW RECREATION AREAS.

Recreation development is usually done at 100-percent non-Federal cost or 50/50-percent cost sharing between the Federal Government and a qualified non-Federal sponsor as directed by policy at the time of the agreement. For the present and the foreseeable future it is unlikely that any new area recreation development will occur at 100-percent Federal cost.

7.04. ADJACENT LAND USES.

Boise County has no zoning or building codes as Ada and Elmore Counties do. A potential for encroachments by private landowners onto Lucky Peak project lands which are adjacent to private lands should be identified and fenced to prevent such encroachment. Since there are no building setback requirements from property lines, it is important that project boundaries are clearly identified. Additionally, fencing would limit conflicting uses and identify encroachments. Planning Division will encourage Boise County to adopt and enforce zoning and building codes to control private development adjacent to Lucky Peak project lands to avoid water and visual pollution due to poor siting or design on public areas or use of project roads and parking areas for access to private property.

7.05. LEASES, OUTGRANTS, AND LANDS TO BE ACQUIRED.

Most of the project area has been acquired in fee or withdrawn from the USBLM. In addition, a number of leases, outgrants, and easements have been granted to IDFG and IDPR or individuals for a variety of uses including wildlife habitat, parks, access roads, and power transmission and utility lines. Current and future uses of project lands must remain compatible with existing leases, easements, and outgrants. Prior to approval, future leases, easements, and outgrants must be carefully considered to ensure compatibility with RO's and land use classifications presented in this MP. Any additional lands to be acquired for recreation or fish and wildlife purposes currently need to be cost shared with a qualified non-Federal sponsor.

7.06. IDAHO DEPARTMENT OF TRANSPORTATION LANDS.

Although the majority of Lucky Peak project lands are managed by the USACE, some are owned by IDOT. Adverse effects can be minimized by establishing a cooperative rapport with highway managers who will then be responsive to the impact which their management decisions will have on USACE sites. Where appropriate, formal agreements should be drafted which spell out cooperative management objectives including, but not limited to:

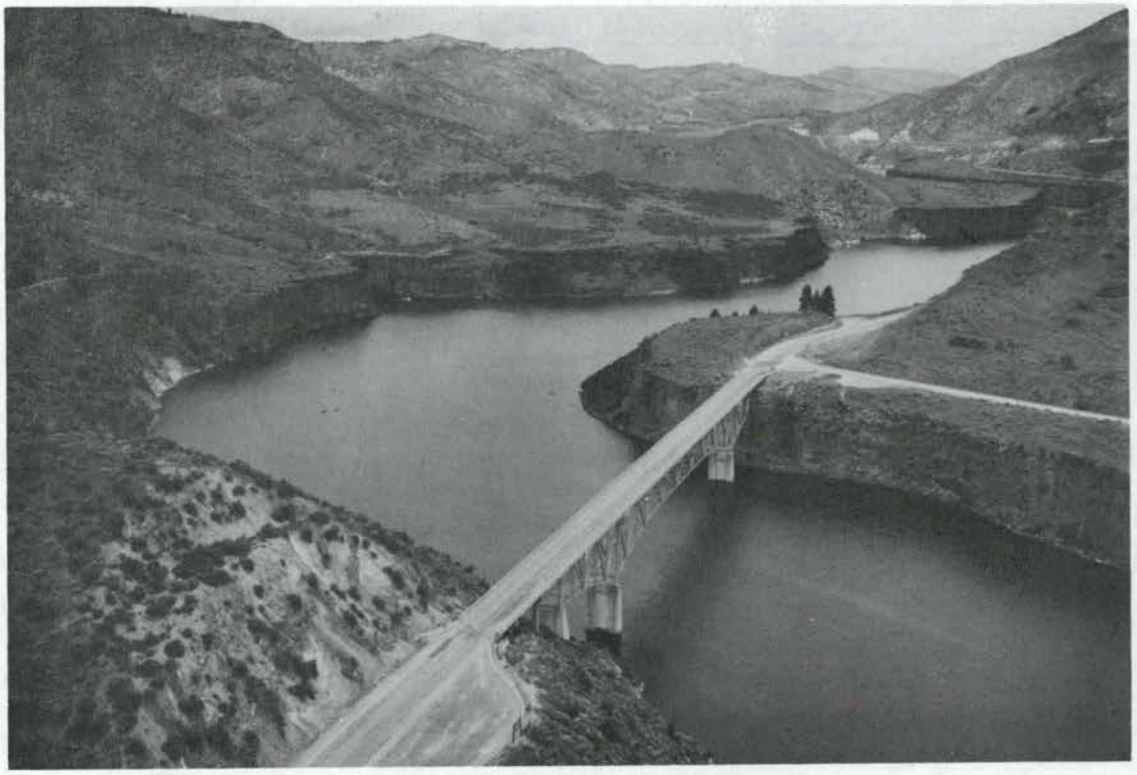


PHOTO 7-1. State Highway 21 - bisects Lucky Peak project; highway right-of-way lands are owned by the State of Idaho.

(1) acceptable vegetative control and establishment techniques, (2) site distance and screening requirements, (3) aesthetic enhancement and recreational use of noncritical IDOT ownerships, and (4) mutually beneficial improvements to public access upon and across transportation land.

7.07. PROJECT FUNDING AND MANPOWER.

This MP has identified project management unit RO's. As discussed in previous sections, implementation of many of these objectives is dependent upon the financial support of local sponsoring agencies. Execution of the other objectives depends upon future USACE funding and manpower capabilities. The project personnel and other District elements should immediately organize the resource management programs, leading to an orderly implementation of objectives of the project.

7.08. POTENTIALLY CONFLICTING USES.

A number of uses or activities occur on the project that constrain future implementation of objectives. In most cases, these existing uses are incompatible with proposed future uses and must be controlled or eliminated.

a. Off-Road Vehicles.

Off-road vehicles (ORV's) have used the Lydle Gulch and Turner Gulch areas. This has resulted in damage to the environment and cultural resources and is incompatible with day use. Project objective calls for restricting ORV's to authorized access roads of the project. Project staff has Title 36 citation authority to enforce this restriction. No project area is identified in this MP as an ORV area.

b. Vandalism.

Vandalism of both natural features and developed facilities, especially restrooms and picnic tables, has occurred. Project signs are a favorite target for shooters. This problem may create visual blight as well as visitor health and safety concerns, not to mention very high maintenance costs. Facility design should be as vandal-resistant as possible. Regulations should be strictly enforced by project personnel with Title 36 citation authority.

7.09. WILDLIFE DISTURBANCE.

Heavy use of the project by the public can disturb wildlife, causing some species to leave the area and even causing mortality in some species if the disturbance occurs during a stressful period for that species. ORV's disturb wildlife and destroy habitat when not confined to authorized project access roads. Great numbers of people trying to view or approach wintering mule deer can be stressful to the deer. People wanting to view deer should be confined to authorized access roads and encouraged to maintain their distance from the deer. Similarly, people approaching wintering bald eagles may disturb the eagles, causing the birds to leave their feeding areas.

7.10. WATER QUALITY.

Potable water supplies are a concern. These wells are the only source of potable water within a reasonable distance of the project. Past testing has shown excellent quality in existing project wells. However, there is some potential for contamination in the future, especially from adjoining rural residential areas. Concern for public safety requires managing agencies, including the USACE and local sponsors, to undertake a continuous monitoring program of potable water sources.

PHOTO 7-2. Fragile soils - The area in the center of the photo is an old quarry used during the construction of the dam. Scars are still visible after 30 years.

7.11. VEGETATION-SOILS.

The shrub-grassland vegetation which characterizes the project is extremely fragile. Areas disturbed by construction, ORV's, etc., remain so for many years. Additional topsoils are very thin and soils are extremely erodible at the project. Some disturbed cuts made 30 years ago are still not revegetated. Because of these factors, vegetation and soil need to be protected and disturbance avoided as much as possible.

7.12. PROPOSED POWERHOUSE AT ARROWROCK DAM.

BPBC has applied for a Federal Energy Regulatory Commission (FERC) license to construct a powerhouse at Arrowrock Dam. The construction phase of the proposed Arrowrock powerhouse will increase the existing pedestrian and vehicle safety hazard along Arrowrock County Road at Spring Shores Unit, LPSP. The safety problem is a result of the county road bisecting Spring Shores, with pedestrians and vehicles having to cross the county road due to the location of parking areas across the county from the marina and boat ramps. Construction traffic from Arrowrock powerhouse will increase the hazard. Relocation of the county road will eliminate the safety problem. An MOU between FERC and USACE gives the Corps review and approval authority over items of design construction and operation so as to assure that the proposed development is consistent with purposes of affected projects and with regulatory functions of the USACE. The license applicant is required to prepare a detailed recreation development plan as part of the FERC license, which needs approval by FERC and the USACE. The recreation plan needs to be fully coordinated with this MP. See TA, Volume 2, Section 3, page 3-54, paragraph 3.03.d.(f) for additional information on the proposed project.

8

RECOMMENDATIONS SUMMARY AND CONCLUSIONS

SECTION 8 - RECOMMENDATIONS, SUMMARY, AND CONCLUSIONS

SECTION 8 - RECOMMENDATIONS, SUMMARY, AND CONCLUSIONS

8.01. GENERAL BACKGROUND.

a. Lucky Peak Lake is a popular recreation area. The two state park areas are the most visited parks in the state. The existing recreation facilities at Lucky Peak sites help meet the recreation (especially water recreation) needs of the four-county area. Opportunities to expand the recreation facilities at Lucky Peak are limited due to steep slopes, poor soils, and critical deer winter range. Because of the continued growth in the Boise metropolitan area, the project will continue to play an important role in meeting future regional recreational needs. For more in-depth details see TA, Volume 2.

b. The project is in the center of the most important mule deer habitat in Idaho. The endangered bald eagle also is present at the site. Other wildlife species common to the project include raptors, upland game birds, songbirds, and small mammals. These species help meet regional desires for hunting and wildlife viewing. Project lands classified Wildlife Management licensed to IDFG consist of extensive acreages comprised primarily of grass and shrub-type habitats. These lands are particularly productive and sensitive environments. The USACE has a stewardship responsibility for these areas which transcends management agreements with the licensee and will use its resources and professional expertise to preserve and protect these areas as productive areas for both consumptive and nonconsumptive wildlife.

c. Fisheries, archaeological-historical, and visual resources are also important in the project area. The USACE will utilize its capabilities and professional expertise to preserve and make available project resources for a broad and varied range of potential uses.

d. Alteration of the MP may be necessary as conditions change. In anticipation, updating will be scheduled when deemed necessary.

8.02. RECOMMENDATIONS.

a. General.

(1) It is recommended that this MP for resource use be approved as a guide to the use, management, and development of the ecological, cultural, and aesthetic resources of the Lucky Peak project, while developing new opportunities for public use and wildlife management.

(2) This MP recommends a broad range of RO's management and development concepts. Those recommendations can be summarized as follows:

- Fish and Wildlife Habitat Development
- Recreation Facilities Development
- Cooperative Planning and Local Sponsorship
- Monitoring and Evaluation Studies
- Operational Management Plan (OMP)
- Amendment of License with IDFG

b. Wildlife and Fish Habitat Development and Management.

(1) The following are ongoing:

- Preserve and maintain critical mule deer winter range.
- Preserve endangered species habitat.
- Protect wildlife habitat.
- Continue to coordinate with IDFG and USFWS concerning fish and wildlife habitat.

(2) The following developments are listed in order of priority:

- Monitor, survey, and evaluate wildlife populations to determine the success of current programs and develop future management objectives.
- Improve existing habitats for wildlife species other than mule deer.
- Develop and maintain fisheries habitat in Lucky Peak Lake and Boise River below Lucky Peak Dam.

c. Recreation Facilities Development and Management.

(1) The following are ongoing:

- Continue to coordinate with IDPR for facilities at Spring Shores and Sandy Point.
- Meet regional recreation needs through MP process.

(2) The following developments are listed in order of priority:

- Relocate road around Barclay Bay; increase parking at Barclay Bay and Turner Gulch.
- Redevelop Spring Shores which includes relocation of county road, additional marina facilities, additional parking, and improvement of visual quality.

- Replace deteriorated facilities.
- Rehabilitate disturbed areas within the project's recreation areas.
- Increase and enhance day-use facilities.
- Develop an interagency visitors center at Viewpoint.
- Improve and expand facilities at Macks Creek.
- Improve access to Sheep Creek, provide launching ramp, parking, and vault toilet.

d. Cooperative Planning and Local Sponsorship.

(1) It is recommended that cooperative planning efforts with Federal, state, local, and citizen interests be continued for development, preservation, or enhancement of land and water resources. Citizen and agency coordination was incorporated into the RO's presented in this MP. Continued coordination will be required to implement those objectives.

(2) Current USACE policy restricts the types of activities the agency can undertake for recreational development and wildlife enhancement without some level of financial sponsorship from a local agency. The USACE must continue to coordinate with the agencies, encouraging them to become involved in cooperative and cost-sharing agreements. During 1972, IDPR has had a cost-sharing agreement with the USACE for developments at Barclay Bay (the area was part of their lease at that time). They would also be the most logical local sponsor for future recreation developments. In addition to providing direct financial sponsorship, IDPR (and other organizations) will also be encouraged to enlist sponsorship by other local organizations. Similarly, environmental or conservation organizations could implement wildlife management objectives within the lease area.

(3) Federal and state resource agencies, including IDFG and USFWS, will be encouraged to continue licensing agreements whereby project fish and wildlife resources can be managed so as to complement USACE objectives and USFWS regional goals.

e. Monitoring and Evaluation Studies.

It is recommended that additional studies monitor and evaluate project resources, management activities, and project objectives to ensure the best identification, evaluation, analysis, and management of project resources. In particular, the following studies are recommended. Continuing studies are listed first, followed by new recommended studies in their order of priority.

(1) Wildlife Monitoring and Evaluation Studies (Continuing).

Wildlife monitoring and evaluation studies provide an index to wildlife use on the project and an estimate of wildlife populations. This information assists biologists in determining whether or not habitat developments are receiving optimum use and what changes should be made to achieve optimum use. These will be ongoing studies by Operations Division in coordination with Planning Division. A partial list of recommended wildlife monitoring and evaluation studies at the project includes:

(a) Mule Deer Studies.

- Winter and summer aerial population surveys.
- Browse utilization surveys.
- Migration counts.
- Habitat alteration and treatment evaluation and analysis.

(b) Bald Eagle Studies.

- Migrant surveys, aerial and ground.
- Habitat alteration and treatment evaluation and analysis.

(c) Raptor nesting surveys.

(d) Breeding bird census by habitat category.

(e) Wintering bird surveys.

(f) Effects of flood control operations on fish and wildlife populations and habitat.

(g) Recreational hunting and fishing surveys.

(2) Visitor Data (Continuing).

Collection of visitor use data is a continuing project responsibility, beginning at the earliest stages of project development. The information derived from visitor use data is recorded in the USACE Natural Resource Management System. This data will assist in evaluating existing project use, determining the adequacy of existing facilities, identifying future facilities requirements, justifying funding, and estimating budgets. Reevaluation of the percentage of nonrecreation vehicles versus recreation vehicles needs to be surveyed periodically. Visitor data is the responsibility of Operations Division.

(3) Cultural Resources Management Plan (Continuing).

A Cultural Resources Management Plan, which includes a section on Lucky Peak, was completed for the Walla Walla District in 1985. Due to the paucity of known archaeological sites within the Lucky Peak project, it is important that an ongoing monitoring program be maintained for all project lands and work activities. In the event that cultural resources are discovered, the District Archaeologist should be notified immediately. If work is being done in the immediate vicinity, it will be stopped until such time that a full assessment of the cultural properties can be made. Archaeological studies are the responsibility of the District Archaeologist, Planning Division.

(4) Recreation Facilities Efficiency and Effectiveness of Operation Study.

(a) No facilities at Lucky Peak are recommended for closure or consolidation. The low cost per visitor as compared to other Corps projects in the Walla Walla District, the short length of the lake which provides for low operations and maintenance (O&M) travel time, the high visitation, and the rising visitor pressure for additional facilities are the main reasons to continue to provide existing facilities. The limited area for expansion make consolidation difficult or impossible.

(b) The areas with only one or two sun shelters on the lake may appear to be possible areas of concern. However, these areas receive very low O&M treatment and provide dispersed recreation on the lake.

(c) It is recommended that a detailed cost estimate of each facility be compiled to use in a more thorough study.

(d) In May 1987, the Army Audit Agency (AAA) found that there was no clearly established method for evaluating the efficiency and effectiveness of operation of recreation areas. An interdisciplinary team of District and project personnel was formed later in 1987 to develop rating criteria to evaluate all recreation sites within the District. Field personnel rated all sites.

(e) Sheep Creek and Deer Creek at Lucky Peak received a low score in the evaluation and are being recommended for further study. However, the study is not conclusive or complete due to accounting methods on the projects. This was the District's first attempt at approaching the problem. The study states "that obtaining accurate data on O&M costs for different recreation sites was difficult to obtain. Many of the sites on a project were grouped together for accounting purposes." (USACE, 1987).

(f) The problem is not Walla Walla District's alone. It is recommended that the Corps Waterways Experimental Station conduct a study and provide guidance for uniform accounting methods to provide reliable data which could be used throughout the Corps as well as a standard evaluation method for efficiency and effectiveness of operations. Without such standard guidance, the results will be biased and favor certain accounting methods.

(5) Soil Studies.

Soil surveys on project lands within Boise and Elmore Counties are very broad or are unsurveyed. It is recommended the USACE contract with the USSCS for soil surveys of project land within Boise and Elmore Counties. The survey shall be equal to the level of the Ada County survey and shall be the responsibility of Operations Division.

(6) Revegetation Studies.

A survey should be conducted of all the areas on project lands where vegetation has been disturbed and has not recovered, such as road cuts and the old quarry above Barclay Bay as shown in Photo 7-2. Thin soils, high erodibility, steep slopes, and low precipitation creates difficult conditions for revegetation. These disturbed areas are potential erosion sources and have negative visual impacts. The study shall also determine the best methods to reestablish native vegetation. Revegetation shall be implemented through the OMP. Operations Division will be responsible for location of the disturbed area with Engineering Division determining the method of revegetation.

(7) Visual Resource Plan.

It is recommended that Planning Division conduct a detailed Visual Resource Management Plan for Lucky Peak Lake viewsheds (lands seen from Lucky Peak project). The plan should identify visual quality management objectives for the viewshed. The plan will make recommendations to protect the visual resources and be a cooperative effort between the USACE and other agencies. It will generally follow the methodology as outlined in USACE Course Notebook, Aesthetic Resources: Inventory, Analysis, and Evaluation. Also see Project RO No. 12, Visual Resources, in Section 3 of this report and Section 3, of Volume 2, paragraph 3.04, Aesthetic Resources - Visual Quality Management.

(8) Lake Zoning Plan.

As identified in project RO No. 4 in Section 3, a zoning plan would help alleviate conflicts in different types of water craft. The plan will be part of the MP and will be the responsibility of Planning Division.

(9) Access Study.

To meet the carrying capacity of Lucky Peak Lake, 210 slips would be required above the proposal of 200 additional slips above the current 300 slips listed in Sections 3 and 5. If the proposed boat launching ramp at Sheep Creek cannot be constructed due to possible limitations, then an additional 70 slips would be required for a total of 280 slips above the current proposal (for a total of 780 slips at Spring Shores). However, due to steep topography, the required parking for the 280 slips is unlikely. Expansion is currently limited to the existing proposal of an additional 200 slips. A possible solution to the parking problem at Spring Shores would be to provide public mass transportation to the project from Boise, Idaho. Currently, transportation is provided for recreation along the the Boise River through Boise. Consideration should be given to providing this service to Lucky Peak. The study will be part of the MP and the responsibility of Planning Division.

f. Operational Management Plan (OMP).

Following approval of this MP, preparation of the OMP for natural resources and park management will be initiated by Operations Division as required and outlined in Appendix 13 of ER 1130-2-400 (1 June 1986). The OMP will be prepared as a separate document and will outline in detail how the management objectives and concepts in the approved MP will be implemented and budgeted.

g. Amendment of License with IDFG.

After the approval of the MP, the license with IDFG shall be amended to reflect the change in land use classifications. All lands classified Wildlife shall be included in the revised license. Land currently under license to IDFG which is now classified Low-Density Recreation shall be deleted from the license.

h. Land Interchange and Subsequent Actions.

Upon completion of the land interchange between the USACE and USFS as described in project RO No. 14 in Section 3 of this report, the two outgrant permits 72-19 and 79-9 will be terminated and lands along Highway 21 will be transferred to the IDOT as described below.

i. IDOT Lands.

Following completion of the land interchange (see paragraph h), the Corps will transfer in fee title 14.3 acres of land just north of Turnaround Point IDOT lands to which the Corps has flowage easements as well as the entrance road to Sandy Point and the right abutment of Lucky Peak Dam. See project RO No. 14 in Section 3 of this report.

8.03. CONCLUSION.

The formulation of a viable plan for development and management of the Lucky Peak Lake project has sought maximum public benefits on a continuing basis. This effort has extended over many years and required interaction and involvement of the general public as well as Federal, state, and local offices; appraisal of natural and cultural resources of the project; and examination of various environmental considerations. The plan will guide use, development, and management of the project in a manner optimizing public benefits within resource potentials and the authorized function of the project.