

[6450-01-P]

DEPARTMENT OF ENERGY

Record of Decision: Hanford Comprehensive Land-Use Plan Environmental Impact Statement (HCP EIS)

AGENCY: Department of Energy

ACTION: Record of Decision

SUMMARY: The Department of Energy (DOE) is issuing this Record of Decision (ROD) to adopt a Comprehensive Land-Use Plan (CLUP) for its Hanford Site in Washington. The purpose of this land-use plan and its implementing policies and procedures is to facilitate decision-making about the site's uses and facilities over at least the next 50 years. The Department's decision seeks to balance the Department's continuing land-use needs at Hanford with its desire to preserve important ecological and cultural values of the site and allow for economic development in the area. This land-use plan consists of several key elements which are included in the Department's Preferred Alternative in the Final Hanford Comprehensive Land-Use Plan Environmental Impact Statement (HCP EIS). These elements are a land-use map that addresses the Hanford Site as five geographic areas – the Wahluke Slope, the Columbia River Corridor, the Central Plateau, All Other Areas of the Site, and the Fitzner-Eberhardt Arid Lands Ecology (ALE) Reserve – and depicts the planned future uses for each area; a set of nine land-use designations that define the permissible uses for each area of the site; and the planning and implementing policies and procedures that will govern the review and approval of future land uses. Together these four elements create the Hanford CLUP.

FOR FURTHER INFORMATION CONTACT: For further information on the Hanford Comprehensive Land Use Plan Environmental Impact Statement (HCP EIS) or to receive a copy of the HCP EIS or other information related to this ROD, contact: Thomas W. Ferns, HCP EIS Document Manager, U.S. Department of Energy, Richland Operations Office, P.O. Box 550, MSIN HO-12, Richland, Washington 99352. You may call (509) 372-0649 or send e-mail to thomas_w_ferns@rl.gov or a fax to (509) 376-4360. The HCP EIS is available electronically on the [DOE NEPA Web \(http://tis-nt.eh.doe.gov/nepa/\)](http://tis-nt.eh.doe.gov/nepa/) under DOE NEPA Analyses.

For information on the DOE *National Environmental Policy Act of 1969* (NEPA) process, contact: Carol M. Borgstrom, Director, Office of NEPA Policy and Assistance (EH-42), U.S. Department of Energy, 1000 Independence Avenue SW, Washington, DC 20585-0119, (202) 586-4600, or leave a message at (800) 472-2756.

SUPPLEMENTARY INFORMATION:

I. Purpose and Need for Agency Action: DOE has assigned elements of each of its four principal missions (National Security, Energy Resources, Environmental Quality, and Science) to the Hanford Site, and has established and maintains several capabilities to support these missions. These Hanford Site capabilities also support applications for other federal agencies and organizations in accordance with national priorities and policies. Today, the Hanford Site has diverse site-specific missions associated with environmental restoration, waste management, and science and technology. These missions have competing land-use needs and management values, and governments and stakeholders within the region have an interest in the management of Hanford resources over the long term. DOE needs to assess the relative qualities of Hanford's resources, compare the priorities and needs of Hanford's missions, and reach decisions such as the identification and disposal of excess lands. DOE Order 430.1a, Life Cycle Asset Management, and Public Law 104-201, Section 3153, National Defense Authorization Act for Fiscal Year 1997, require a land-use plan for the Hanford Site. The Final HCP EIS provides the analysis needed to adopt a land-use plan. Once adopted, the land-use plan will provide a framework for making land-use and facility-use decisions.

This ROD, after considering extensive public comment and cooperating agency input, adopts a land-use map, land-use designations, planning policies, and implementing procedures that the Department believes will best meet its mission needs for at least the next 50 years. This ROD begins the implementation of the CLUP, as described in the HCP EIS. There are four elements to the CLUP implementation:

1. The DOE Preferred Alternative land-use map, that depicts land uses for areas of the Hanford site, including the Wahluke Slope, Columbia River Corridor, Central Plateau, Fitzner/Eberhardt Arid Lands Ecology (ALE) Reserve, and All Other Areas of the Hanford Site. The Preferred Alternative land-use map reflects the expansion of the proposed U.S. Fish and Wildlife Service (USFWS) wildlife refuge for preservation as well as for Hanford Site buffer zone uses. This expanded wildlife refuge includes the entire geographic areas of the Wahluke Slope, the Columbia River islands not in Benton County, the Riverlands, the McGee Ranch, and the ALE Reserve. The Preferred Alternative land-use map also allows full implementation of DOE mission elements assigned to Hanford, and will allow expansion of operations at Hanford as the need arises.
2. The land-use designations that define the purpose, intent, and principal use(s) of each of the land-use designations on the CLUP Preferred Alternative land-use map.
3. The land-use policies that direct land-use actions. The policies will help to ensure that individual land use actions collectively advance the CLUP Preferred Alternative map, goals, and objectives over time.
4. The land-use plan implementing procedures that include administrative procedures for reviewing and approving use requests; a Site Planning Advisory Board (SPAB) consisting of representatives of DOE, cooperating agencies of the HCP EIS, and affected Tribal governments; and actions to be undertaken under the land-use plan to align and coordinate Hanford site management plans.

II. Hanford Site Features: Key features of the Hanford Site that form the basis for the five geographic areas used in the environmental impacts analysis and land-use plan are summarized as follows.

- **The Wahluke Slope.** The area north of the Columbia River encompasses approximately 357 km² (138 mi²) of relatively undisturbed or recovering shrub-steppe habitat. The Wahluke Slope is managed for DOE by both state and federal agencies under permit agreements. The western portion of the Wahluke Slope is managed by the USFWS as the Saddle Mountain National Wildlife Refuge. The USFWS has recently taken over management of most of the remainder of the Wahluke Slope from the WDFW . Current permit conditions require the Saddle Mountain National Wildlife Refuge to be closed to the public as part of a security zone for the N Reactor (now shut down), and as a buffer zone for the current K Basins spent nuclear fuel (SNF) removal project The area continues to serve as a buffer and security area for several nuclear materials management and cleanup activities. Various levels of public access for recreational activities are allowed on the Wahluke Slope.
- **Columbia River Corridor.** The 111.6 km² (43.1 mi²) Columbia River Corridor, which is adjacent to and runs through the Hanford Site, is used by the public and Tribes for boating, water skiing, fishing, and hunting of upland game birds and migratory waterfowl. While public access is allowed on certain islands, access to other islands and adjacent areas is restricted because of unique habitats and the presence of cultural resources.

Along the southern shoreline of the Columbia River Corridor, the 100 Areas occupy approximately 68 km² (26 mi²). The facilities in the 100 Areas include nine retired plutonium production reactors, associated facilities, and structures. *Resource Conservation and Recovery Act of 1976 (RCRA)* closure permit restrictions have been placed in the vicinity of the 100-H Area, which is associated with the 183-H Solar Evaporation Basins. Additional deed restrictions or covenants for activities that potentially extend more than 4.6 m (15 ft) below ground surface are expected for the *Comprehensive Environmental Restoration, Compensation, and Liabilities Act of 1980 (CERCLA)* remediation areas.

The area within the Columbia River Corridor known as the Hanford Reach includes an average of a 402 m (1,320 ft) strip of public land on either side of the Columbia River. The Hanford Reach is the last free flowing, nontidal segment of the Columbia River in the United States.

- **Central Plateau.** The 200 East and 200 West Areas occupy approximately 51 km² (19.5 mi²) in the Central Plateau of the Hanford Site. Facilities located in the Central Plateau were built to process irradiated fuel from the plutonium production reactors. The operation of these facilities resulted in the treatment, storage, disposal, and unplanned release of radioactive and nonradioactive waste. The Environmental Restoration Disposal Facility for CERCLA cleanup wastes is located in the Central Plateau. Other federal agencies, such as the Department of the Navy, also use Hanford nuclear waste treatment, storage or disposal facilities. Deed restrictions or covenants for activities that potentially

may extend more than 4.6 m (15 ft) below ground surface are expected for CERCLA remediation areas in the Central Plateau.

In 1964, a 410 ha (1,000 ac) tract was leased to the State of Washington to promote nuclear-related development. A commercial low-level radioactive waste disposal facility, run by U. S. Ecology, Inc., currently operates on 41 ha (100 ac) of the recently reduced leasehold.

- **All Other Areas.** All Other Areas comprise 689 km² (266 mi²) and contain the 300, 400, and 1100 Areas, Energy Northwest facilities, and a section of land currently owned by the State of Washington for the disposal of hazardous substances.

The Hanford 1100 Area and the Hanford railroad southern connection (from Horn Rapids Road to Columbia Center) have been transferred from DOE ownership to Port of Benton ownership to support future economic development. Although the 1100 Area is no longer under DOE control, it is included in the HCP EIS to support the local governments with their State Environmental Policy Act (SEPA) EIS analyses of the Hanford sub-area of Benton County under the State of Washington's Growth Management Act.

The 300 Area is located just north of the City of Richland and covers 1.5 km² (0.6 mi²). The 300 Area is the site of former reactor fuel fabrication facilities and is also the principal location of nuclear research and development facilities serving the Hanford Site.

The 400 Area, located southeast of the 200 East Area, is the site of the Fast Flux Test Facility, which is being evaluated in an ongoing EIS. The proposed mission for the 400 Area is reactor operations and irradiation services with attendant support functions including fuel and target fabrication, target processing, and interim storage.

Energy Northwest currently operates Washington Nuclear Plant Number 2 on leased land approximately 10 km (6 mi) north of the 1100 Area. Originally leased for the operation of three nuclear power plants, construction of two of the plants was halted and now other industrial options are being considered.

In 1980, the Federal government sold a 259 ha (640 ac) section of land south of the 200 East Area, near State Route 240, to the State of Washington for the purpose of nonradioactive hazardous waste disposal. To date, this parcel has not been used for hazardous waste disposal, and it is undeveloped and uncontaminated (although the underlying groundwater is contaminated). The deed requires that if it is used for any purpose other than hazardous waste disposal, ownership would revert to the Federal government.

Additional activities in the All Other Areas include: *A specialized training center.* The Hazardous Materials Management and Emergency Response (HAMMER) Volpentest Training and Education Center is used to train hazardous materials response personnel. It is located north of the 1100 Area and covers about 32 ha (80 ac). *A regional law-enforcement training facility.* The Hanford Patrol Training Academy provides a range of

training environments including classrooms, library resources, practice shoot houses, an exercise gym, and an obstacle course. *A national research facility.* The Laser Interferometer Gravitational Wave Observatory (LIGO), built by the National Science Foundation for scientific research, is designed to detect cosmic gravitational waves. The facility consists of two optical tube arms, each 4 km (2.5 mi) long, arrayed in an "L" shape, and is extremely sensitive to vibrations.

- **Fitzner/Eberhardt Arid Lands Ecology Reserve (ALE Reserve).** The ALE Reserve encompasses 308.7 km² (119.2 mi²) in the southwestern portion of the Hanford Site and is managed as a habitat and wildlife reserve and environmental research center.

The mineral rights to a 518 ha (1,280 ac) area on the ALE Reserve are owned by a private company. The company has been free to enter this area and explore for oil or gas since 1977.

Public access to the ALE Reserve has been restricted since 1943, resulting in high quality shrub-steppe habitat.

III. The Hanford Site and Its Missions: The Hanford Site occupies 1,517 square kilometers (km²) (586 square miles [mi²]) in southeastern Washington. DOE has assigned elements of each of its four principal missions (National Security, Energy Resources, Environmental Quality, and Science) to the Hanford Site, and has established and maintains several capabilities to support these missions. These Hanford Site capabilities also support applications for other federal agencies and organizations in accordance with national priorities and policies. Today, the Hanford Site has diverse site-specific missions associated with environmental restoration, waste management, and science and technology. These missions have resulted in the growing need for a comprehensive, long-term approach to planning and development for the Site.

To meet this need, the HCP EIS analyzes the potential environmental impacts of alternative land-use plans for the Hanford Site and considers the land-use implications of ongoing and proposed activities. DOE is currently engaged in other NEPA reviews that include the Hanford Site as an alternative location for the proposals under consideration such as possible new missions for the Fast Flux Test Facility. These other NEPA reviews include programmatic and project-specific environmental impact statements and are listed in the Final HCP EIS in Table 1-1, *NEPA Reviews Affecting the Hanford Site*, along with their potential land-use impacts. Since these other environmental impact statements identify potential new or expanded activities for the Hanford Site, DOE needs to retain infrastructure at the Hanford Site pending completion of these reviews and corresponding decision documents. DOE expects that, in the future, new programs, projects, and facilities will be proposed for the Hanford Site, or will consider the Hanford Site as an alternative site for such facilities or activities. These new proposals will be analyzed in programmatic or project-specific NEPA reviews. Subsequent DOE decisions on these proposals may amend this ROD.

IV. 1996 Draft EIS Emphasized Remediation: After a public scoping process, DOE issued the *Draft Hanford Remedial Action Environmental Impact Statement and Comprehensive Land-Use Plan* (HRA-EIS) (DOE/EIS-0222D) for public review and comment on September 13, 1996. The

public comment period for the Draft HRA-EIS initially ran through November 1, 1996, and was extended through December 10, 1996. During the public comment period, DOE held informational meetings and public hearings to receive comments in Richland, Seattle, and Mattawa, Washington; and in Portland and Hood River, Oregon.

V. Revised Draft Emphasized Land-Use Planning: As a result of public comments received, and changes in DOE's NEPA/CERCLA/RCRA integration policies, DOE focused the document on land-use planning. Pursuant to DOE's NEPA Regulations at 10 CFR Part 1021, DOE invited local and Federal governments to participate as cooperating agencies, and the affected Tribal governments to participate in preparing the EIS. Because DOE, the cooperating agencies and Tribal governments significantly revised the Draft HRA-EIS and its alternatives, DOE issued a Revised Draft HRA-EIS for public comment. Since land use was within the scope of the original Draft HRA-EIS, no further scoping was held.

VI. Public Review of the Revised Draft HRA-EIS: On April 23, 1999, the Environmental Protection Agency (EPA) published a Notice of Availability in the *Federal Register* (64 FR 78 p19999) for the Revised Draft HRA-EIS, starting a 45-day public comment period that ended on June 7, 1999. Public hearings on the Revised Draft HRA-EIS were held on May 18, 1999, in Portland, OR; May 20, 1999, in Richland, WA; June 2, 1999, in Mattawa, WA; and June 3, 1999, in Spokane, WA. DOE considered all comments on the Revised Draft HRA-EIS in preparing the Final EIS. DOE received more than 400 letters, postcards, questionnaires, surveys and electronic mail messages. In addition, more than 200 pages of transcripts were generated during the four public hearings.

In the Revised Draft EIS, DOE requested public comment on a proposal to change the name of the document to more accurately reflect its focus on land-use planning. Public comments supported this proposal and DOE changed the name of the September 1999 final document to the *Final Hanford Comprehensive Land-Use Plan Environmental Impact Statement* (HCP EIS).

VII. Cooperating Agencies and Consulting Governments: Nine cooperating agencies and consulting Tribal governments participated in preparing the HCP EIS: the U.S. Department of the Interior (Bureau of Land Management [BLM], Bureau of Reclamation, and the USFWS); the City of Richland, Washington; Benton, Franklin, and Grant Counties; the Nez Perce Tribe, Department of Environmental Restoration and Waste Management; and the Confederated Tribes of the Umatilla Indian Reservation (CTUIR). Each of the EIS action alternatives represents a land-use vision of one or more of the cooperating and consulting agencies.

VIII. The Proposed Action and Alternatives Considered: The proposed action for the HCP EIS is to develop and implement a comprehensive land-use plan (CLUP) for the Hanford Site. The elements of the CLUP include a land-use map, land-use designations, land-use policies, and a set of procedures for plan implementation. DOE and the cooperating agencies and consulting governments analyzed six alternative land-use maps, including the No-Action Alternative, the DOE Preferred Alternative, and four other Alternatives, using the nine land-use designations. The land-use designations and land-use plan policies and implementation procedures described in Section IX do not apply to the No-Action Alternative.

IX. Land-Use Designations: The land-use designations used in the evaluation process are as follows:

- **Industrial-Exclusive:** An area suitable and desirable for treatment, storage, and disposal of hazardous, dangerous, radioactive, nonradioactive wastes, and related activities.
- **Industrial:** An area suitable and desirable for activities such as reactor operations, rail, barge transport facilities, mining, manufacturing, food processing, assembly, warehouse, distribution operations and related activities.
- **Agricultural:** An area designated for the tilling of soil, raising of crops and livestock, and horticulture for commercial purposes along with all those activities normally and routinely involved in horticulture, the production of crops and livestock, and related activities.
- **Research and Development:** An area designated for conducting basic or applied research that requires the use of a large-scale or isolated facility or smaller scale time-limited research conducted in the field or in facilities that consume limited resources. This designation includes related activities.
- **High-Intensity Recreation:** An area allocated for high-intensity, visitor-serving activities and facilities (commercial and governmental), such as golf courses, recreational vehicle parks, boat launching facilities, Tribal fishing facilities, destination resorts, cultural centers, museums, and related activities and facilities.
- **Low-Intensity Recreation:** An area allocated for low-intensity, visitor-serving activities and facilities, such as improved recreational trails, primitive boat launching facilities, permitted campgrounds, and related activities and facilities.
- **Conservation (Mining and Grazing):** An area reserved for the management and protection of archeological, cultural, ecological, and natural resources. Limited and managed mining (e.g., quarrying for sand, gravel, basalt, and topsoil for governmental purposes only) and grazing could occur as a special use (i.e., a permit would be required) within appropriate areas. Limited public access would be consistent with resource conservation. This designation includes related activities.
- **Conservation (Mining):** An area reserved for the management and protection of archeological, cultural, ecological, and natural resources. Limited and managed mining (e.g., quarrying for sand, gravel, basalt, and topsoil for governmental purposes only) could occur as a special use (i.e., a permit would be required) within appropriate areas. Limited public access would be consistent with resource conservation. This designation includes related activities.
- **Preservation:** An area managed for the preservation of archeological, cultural, ecological, and natural resources. No new consumptive uses (i.e., mining or extraction of non-renewable resources) would be allowed within this area. Limited public access would be consistent with resource preservation and DOE's need to provide a buffer zone. This designation includes related activities.

X. Alternatives Considered: The six alternative land-use maps analyzed in the HCP EIS include the No-Action Alternative, DOE's Preferred Alternative, and four other Alternatives that were developed by cooperating agencies and consulting Tribal governments. The major differences in environmental impacts among alternatives are potential cultural, biological, and geological impacts due to consumptive land-use practices; socioeconomic effects due to Hanford

Site employment changes; and human health risk impacts related to allowable land uses. The six alternatives are:

- **No-Action Alternative.** The No-Action Alternative represents the current status of land use at the Hanford Site and no change from current land management processes or intergovernmental relationships with the cooperating agencies. Specific land-use decisions for Hanford would continue to be made under the NEPA process, based on the current *Hanford Strategic Plan* (Mission Plan) and on a project-by-project basis, based on the Tri-Party Agreement (TPA) remediation decision-making process.
- **DOE's Preferred Alternative.** DOE's Preferred Alternative anticipates multiple uses of the Hanford Site, including future DOE missions, non-DOE federal missions, and other public and private-sector land uses. DOE's Preferred Alternative will do the following: Consolidate waste management operations on 50.1 km² (20 mi²) in the Central Plateau of the site; allow industrial development in the eastern and southern portions of the Hanford Site and allow an increase in recreational access to the Columbia River; designate a portion of the Hanford Site for preservation and a buffer zone by allowing for expansion of the existing Saddle Mountain National Wildlife Refuge overlay to include all of the Wahluke Slope (North Slope) of the Hanford Site (consistent with the Department of Interior's [DOI] 1994 Hanford Reach of the Columbia River Comprehensive River Conservation Study and Final EIS, and 1996 Hanford Reach ROD); the Columbia River islands not in Benton County; the Riverlands; the McGee Ranch; and the ALE Reserve. It will also ensure that, where practicable, withdrawn Bureau of Land Management lands are clean enough to support BLM's multiple-use mandate.
- **Alternative One (Natural Resources Trustee).** The USFWS's alternative emphasizes a Federal stewardship role for managing the natural resources at Hanford. This alternative considers these resources in a regional context, and would allow for expansion of the existing Saddle Mountain National Wildlife Refuge to include all of the Wahluke Slope (North Slope), all of the Columbia River Islands including a 402 meter (quarter-mile) buffer on the Benton County side of the river, the Riverlands, the McGee Ranch, and the ALE Reserve (e.g., all of the Hanford lands north and east of the Columbia River and west of State Highways 240 and 24, and the Hanford Reach study area). Alternative One would conserve the Hanford Site shrub-steppe ecosystem and protect the Hanford Reach.
- **Alternative Two (Nez Perce Tribe, Department of Environmental Restoration and Waste Management).** The Nez Perce alternative calls for preservation of natural and cultural resources and traditional Tribal uses at the site. Future DOE missions would be constrained to the Central Plateau, 300 Area, and 400 Area. Both this alternative and Alternative Four reflect Tribal visions and views of Tribal members' treaty rights and traditional Tribal uses of Hanford lands. The Tribes and DOE have "agreed to disagree" on the interpretation of treaty rights on Hanford lands in the interest of moving the EIS process forward. Each party reserves the right to assert its respective interpretation of treaty rights at Hanford.
- **Alternative Three (Cities and Counties).** This local governments' alternative anticipates multiple uses and is based on the individual planning efforts of local agencies and organizations under the state's Growth Management Act including Benton County, Franklin County, Grant County, and the City of Richland. Alternative Three emphasizes the economic development potential of the Hanford Site. Alternative Three would allow

dryland (non-irrigated) agricultural and grazing activities, and irrigated agriculture on the Hanford Site. The land-use designations contained in Alternative Three were developed consistent with local availability of infrastructure, nearness of urban areas, soils capabilities, and current use patterns.

- **Alternative Four (Confederated Tribes of the Umatilla Indian Reservation [CTUIR]).** This CTUIR alternative calls for preservation of natural resources and areas of religious importance to the CTUIR as well as traditional Tribal uses at the Site. Both this alternative and Alternative Two reflect Tribal visions and views of Tribal members' treaty rights and traditional Tribal uses of Hanford lands.

XI. Environmentally Preferable Alternative: The Council on Environmental Quality (CEQ) NEPA Regulations (40 CFR 1505.2) require a ROD to identify the "environmentally preferable alternative" -- that is, the alternative that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historic, cultural, and natural resources. After considering impacts to each resource area by alternative, DOE has identified Alternative One as the Environmentally Preferable Alternative. Alternative One represents a Federal stewardship role for managing natural resources on the Hanford Site with the acknowledged consumptive treaty-reserved rights from Article 3 of the Yakama and Nez Perce Treaties, "the right of taking fish at all usual and accustomed places in common with citizens of the Territory; and of erecting temporary buildings for curing"; as well as the similar language from Article 1 of the CTUIR Treaty, "the exclusive right of taking fish in the streams running through and bordering said reservation is hereby secured to said Indians, and at all other usual and accustomed stations in common with citizens of the United States, and of erecting suitable buildings for curing the same." Alternative One does not, however, include the tribal vision of consumptive non-fishing activities by tribal members exercising their reserved treaty rights, implicit in Alternatives Two and Four. Specifically, these asserted consumptive rights are from Article 3 of the Yakama and Nez Perce Treaties, "together with the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed land," as well as the similar language from Article 1 of the CTUIR treaty, "the privilege of hunting, gathering roots and berries and pasturing their stock on unclaimed lands in common with citizens, is also secured to them."

XII. Environmental Impacts of the DOE Preferred Alternative: In making its decision, DOE balanced environmental impacts with other factors, including meeting DOE mission needs and allowing regional economic development. DOE analyzed the potential impacts that might occur to land, water, air, ecological and biological resources, human health, environmental justice, cultural resources, socioeconomic values, infrastructure, and waste management for the six alternatives. DOE considered the impacts that might occur from use of special nuclear materials, facility accidents, and other materials associated with Hanford Site operations. DOE considered the impacts of projects and activities, the irreversible or irretrievable commitments of resources, and the relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity. The highest resource impacts, as with any other alternative, will be to cultural, biological, and geological resources from consumptive land-use practices. Under DOE's Preferred Alternative, the following resources potentially would be affected: geologic, water, biologic, cultural, visual, noise, and socioeconomic. Generally, the environmental impacts from the preservation and conservation aspects of this alternative would

be environmentally beneficial. Any negative environmental impacts would be more likely for biological, cultural, and geological resources as a consequence of consumptive land uses. The impacts of the DOE Preferred Alternative that we are adopting today are discussed fully in Chapter 5 of the HCP EIS. Additionally, mitigation of these impacts would occur through the resource management plans identified in Chapter 6 of the HCP EIS. (See "Mitigation Measures" that follow.)

DOE also evaluated the environmental justice and human health impacts of this alternative.

- **Environmental Justice:** DOE expects no environmental justice impacts from the operation of the Hanford Site under the Preferred Alternative (i.e., projected impacts from the Preferred Alternative would not be disproportionately high and adverse for minority or low-income populations in the area). As a general matter, the human health effects from any of the alternatives is expected to be small. DOE analyzed human health impacts from exposure through special pathways, including ingestion of game animals, fish, native vegetation, surface waters, sediments, and local produce; absorption of contaminants in sediments through the skin; and inhalation of plant materials. The special pathways have the potential to be important to the environmental justice analysis because some of these pathways may be more important or viable for the traditional or cultural practices of minority populations in the area. In this case, however, these special pathways would not be expected to result in disproportionately high and adverse impacts to minority or low-income populations. Increased access to the Columbia River would potentially increase exposure. Minority or low-income populations may be more prone to adopt a subsistence lifestyle, but the adoption of such a lifestyle would not be expected to result in disproportionately high and adverse impacts. Areas of cultural value to Tribal members would be protected, but development would be allowed within the viewscapes of some of those areas. Economic development of Hanford Site lands would not impose disproportionately high and adverse impacts on low-income and minority communities within the assessment area. Prohibiting agriculture on the Wahluke Slope would not change the current socioeconomic condition.
- **Human Health:** Land uses under the Preferred Alternative, like any other alternative, could indirectly affect human health. New developments on the Hanford Site under the Preferred Alternative could lead to an increase in occupational injuries and fatalities associated with sand, gravel and basalt mining and industrial activities, and increased recreational activities could increase the risk of injury from recreational accidents. DOE's current monitoring program data do not indicate that adverse health impacts would be associated with consumption of fish and game.

The alternatives considered in the HCP EIS, including the Preferred Alternative, were developed based on the assumption that human health risks associated with contamination at the Hanford Site will continue to be addressed through the RCRA and CERCLA processes. These processes are expected to reduce human health risk to acceptable levels through remedial actions and administrative controls, such as deed restrictions, which are imposed by CERCLA RODs. DOE has also assumed that the future land uses under the Preferred Alternative would not be allowed until remediation has reduced human health risk to levels acceptable for the intended land uses, or DOE has

followed the process described in Chapter 6 of the HCP EIS that would modify that land use while maintaining institutional controls.

XIII. Mitigation Measures: Future uses of the Hanford Site will be subject to mitigation under the CLUP policies and procedures or the NEPA/CERCLA/RCRA integrated processes. All proposals of land use potentially affecting resources will be required to comply with the applicable resource-specific requirements. The CLUP policies and procedures will provide resource management plans to advise the project proponent on strategies to avoid or minimize environmental impacts. Plan policies and procedures, as conveyed by resource management plans and area management plans, will be developed and integrated to support an overall mitigation strategy. Mitigation for specific actions, such as sand, gravel and basalt mining, would be controlled through the issuance of special use permits. Mitigation efforts that may be required by DOE include, avoidance of impacts, replacement of topsoil, soil stabilization techniques to control wind erosion, and documentation of unique features before mining. To reduce the impacts on water resources, the following tactics can be employed: using silt fences around development sites to contain soil erosion and minimize silt release near surface water, requiring a demonstration of no adverse impact on groundwater due to increased infiltration and transportation of vadose zone contamination resulting from development, and minimizing the use of groundwater so that water withdrawal will not alter groundwater flow and influence existing contamination plumes.

All proposals of land use potentially affecting sensitive biological resources are required to comply with applicable statutes, such as the *Endangered Species Act of 1973*. Some mitigation efforts that could reduce impacts to biological resources include minimizing disturbance of wetlands and replacing disturbed wetlands through purchase, construction, or restoration; reclamation of disturbed areas using native vegetation; and scheduling activities to avoid critical nesting, roosting, leking (i.e., mating), breeding, and fawning times.

Impacts to cultural resources of specific project proposals will be evaluated through the resource management plan process, including potential impacts on American Indian treaty rights and known archaeological and historic sites. To reduce impacts to cultural resources, DOE will continue to schedule activities to avoid conflicts with American Indian traditional and religious uses, and will continue to conduct consultations with the DOE Richland Operations Office Cultural Resources Program Manager, the Washington State Historic Preservation Office, affected Tribal governments, and Wanapum Band representatives to identify additional mitigation measures or project alternatives.

Potential mitigation for aesthetic resources include: site reclamation, implementing dust control measures, covering loads when hauling materials away from project sites, siting development or sand, gravel and basalt mining activities in areas where these activities least impact the viewshed from basalt outcrops or their talus slopes such as Gable Butte and Gable Mountain, and minimizing noise impacts to wildlife by restricting activities that generate noise.

XIV. Discussion of Comments on the Final Hanford Comprehensive Land-Use Plan Environmental Impact Statement: DOE made the Final HCP EIS publicly available and distributed approximately 500 copies to Congressional members and Committees, the States of

Washington and Oregon, various American Indian Tribal governments and organizations, local governments, other Federal agencies, and interested organizations and individuals. DOE received three comment letters on the Final HCP EIS from three sources: 1) Washington Department of Fish and Wildlife (WDFW), 2) an individual commenter, and 3) National Center for Environmental Health.

WDFW Comment: In a letter dated 10/25/99, the WDFW commended DOE for designating the ALE Reserve, McGee Ranch/Riverland Site, and the North Slope (Wahluké Slope) as Preservation consistent with national wildlife refuge management, stating that "With these actions, USDOE will strengthen the integrity of Hanford's terrestrial ecosystem and further the protection of important aquatic resources with the Hanford Reach." WDFW also applauded DOE for designating both shorelines of the Columbia River as Preservation, and for removing grazing from the Preferred Alternative. WDFW stated that, "These actions are consistent with USDOE's stewardship role and policies on ecosystem management."

WDFW was disappointed that the Final HCP EIS does not address several concerns that WDFW had expressed earlier. It was "generally concerned about the fate of biological resources that occur within central Hanford but outside the Preservation and Conservation designation delineated in the Preferred Alternative specifically shrub-steppe habitat, a priority habitat for WDFW, and attendant biological resources in the subject areas remain vulnerable to development. Further, it appears that the probable listing of Washington's sage grouse population under the Endangered Species Act has not been considered by USDOE. Even without a Federal ESA listing action, we view the shrub-steppe habitats of the Hanford Site as invaluable elements in the recovery of Washington's sage grouse."

DOE Response: DOE believes that it is premature to consider the potential specific impacts of a petitioned Endangered Species Act (ESA) listing until the listing and associated conditions are issued. However, it should be noted that the McGee Ranch, which WDFW considers as habitat critical to the natural reestablishment of sage grouse populations on ALE, is designated Preservation under the Preferred Alternative. In addition, grazing, which has been identified as a threat to sage grouse, has been deleted from the Preferred Alternative as an allowable land use for this area. The wildlife agencies managing the areas of the Hanford Site designated Preservation may decide to attempt to reintroduce sage grouse within those areas.

WDFW Comment: "Our largest area of concern lies in the southeast corner of the site, where Industrial, and Research and Development designations overlay Level II (shrub steppe) resources. The FEIS relies on the Draft Hanford Site Biological Resource Management Plan (BRMaP) and its sub-tier document the Draft Hanford Site Biological Resources Mitigation Strategy Plan (BRMiS) to describe biological resources and to make decisions about mitigation requirements. The current drafts of BRMaP and BRMiS would require avoidance and minimization of impacts to Level II resources but would not require compensatory mitigation for unavoidable impacts. This single loophole puts more than 80,000 acres of shrub steppe habitat at risk. The FEIS calls for revisions to the two biological plans but there is no commitment to the outcome. We request that the ROD include a commitment to use the full mitigation hierarchy, as defined by the Council on Environmental Quality (CEQ), wherever impacts to biological resources occur at Hanford."

DOE Response: DOE will continue its policy to mitigate impacts in areas disturbed by new activities, as appropriate. Specific commitments and Mitigation Action Plans will be developed on a case-by-case basis during project-specific NEPA reviews. For any specific new proposals, DOE will consider in its decision making all appropriate types of mitigation defined by CEQ.

WDFW Comment: WDFW maintains that "it is inappropriate for USDOE to invoke Irretrievable and Irreversible language to avoid the responsibility to mitigate for impacts to shrub steppe and other biological resources (See specific FEIS response RL318-44). Unavoidable adverse impacts can be substantially reversed and habitat functions restored through implementation of CEQ's mitigation hierarchy. There are many disturbed areas and old fields within Conservation designations where compensatory mitigation can be conducted. Especially with the potential ESA listing of sage grouse, USDOE and other federal agencies should exercise all practical means to contribute to the protection and restoration of sage grouse habitat."

DOE Response: Irretrievable and irreversible commitments of resources could effect CERCLA natural resources damages assessment liabilities, and such potential commitments are discussed in the HCP EIS as required by NEPA regulations. To the extent that such irretrievable and irreversible commitments of resources are made in the future as described in Chapter 6 of the HCP EIS, it does not mean that DOE would not voluntarily mitigate potential injuries to natural resources. This land-use plan ensures that the mitigations taken will be coordinated and located in appropriate areas. For example, mitigation could be conducted in areas designated for Conservation or Preservation as allowed under the CLUP or the administering wildlife agencies' management plans.

WDFW Comment: "Our final concern also relates to potential shrub steppe impacts, due to the lack of a thorough NEPA analysis of geologic source sites. The current EIS process seemed to be the logical place for such an analysis, but no biological surveys were included for any of the source sites mentioned. We strongly endorse 'a coordinated NEPA analysis to address the gravel quarries on a site-wide basis' (specific FEIS response #445-21). We request that USDOE commit to this analysis in the ROD, thereby honoring earlier commitments made in the Tank Waste Remediation System Environmental Impact Statement and addressing Hanford Natural Resource Trustee Council concerns expressed by letter to Mr. Paul Dunigan, USDOE, dated August 13, 1999."

DOE Response: In addition to the ALE soil and basalt quarry site that was evaluated in Appendix D, the HCP EIS designates general areas for consideration as potential sources of geological material (Conservation [Mining]). DOE intends to honor the commitment in the Tank Waste Remediation System EIS to perform a NEPA analysis addressing gravel quarries.

Individual Commenter: "Now that the Final Hanford CLUP-EIS designates areas for industrial land use, I expect the numeric cleanup levels to increase significantly in those areas designated for 'industrial use.' I disagree with USDOE's response to my comment (*Comment Response Document* response number RL 154-08) that this 'is a TPA issue.'"

DOE Response: The CLUP is to provide guidance to all of Hanford's land-use activities, including the clean-up mission. The CLUP may be used by the regulators to help establish clean-

up goals during the CERCLA/RCRA process. However, land-use is only one of several criteria the TPA regulators may use to determine clean-up levels. The TPA governs selection of specific remedies, including numeric clean-up levels for those remedies. The TPA has its own public involvement process during which these clean-up levels would be subject to public comment. There is also a regulatory link between the state's Model Toxics Control Act and the state's Growth Management Act (as represented by Alternative Three) that could also affect clean-up levels. DOE will forward this comment letter to the appropriate TPA contacts at EPA and Ecology.

Individual Commenter: "It is requested that the Final Hanford CLUP-EIS ROD include language which identifies the USDOE the primary environmental steward for all Hanford Site areas regardless of land-use designation. In addition, it is requested that the Final Hanford CLUP-EIS ROD identify a commitment to ensure applicable contamination pathways (groundwater and surface water) will be taken into consideration for establishment of all future cleanup levels."

DOE Response: Environmental stewardship responsibilities are clearly assigned by Federal law and Executive Order to DOE for lands under its executive control. Consideration of applicable contamination pathways would occur under the TPA process.

Individual Commenter: "My comment (number 15 of my May 27, 1999 letter numbered RL 154-06 by the *Comment Response Document*) regarding disclosure of remaining soil contamination during the conveyance of ownership was not addressed."

DOE Response: Transfer of federal lands where hazardous substances have been used is controlled by section 120(h) of CERCLA where a notice of the type and quantity of hazardous substances that have been on the property is required before transfer. Additionally, for economic development transfers, please refer to page 1-42 of the Final HCP EIS, Table 1-4, "Regulations Affecting Land Transfer" (under Approvals), which states: "Section 3154 of the Hall Amendment of the Defense Authorization Act of 1994 requires Secretary approval or designee plus Administrator of EPA for NPL Site or appropriate State official" before the land can be transferred.

National Center for Environmental Health Comment: The National Center for Environmental Health Comment thanked DOE for the opportunity to review and comment on the FEIS and requested a copy of any future environmental impact statements which may indicate potential public health impacts that are developed under the National Environmental Policy Act (NEPA).

DOE'S DECISION

DOE's decision is to adopt the DOE Preferred Alternative land-use map as shown in the HCP EIS and to implement the DOE Preferred Alternative using the policies and procedures described in Chapter 6 of the HCP EIS. DOE is selecting the Preferred Alternative over the other alternatives, including the Environmentally Preferable Alternative (Alternative One) because it offers the best balance between DOE's mission needs, including economic development, and the

need to protect environmental resources. In response to comments received during the public review of the Revised Draft EIS, DOE modified its Preferred Alternative in the Final EIS, bringing it closer to the Environmentally Preferable Alternative by increasing natural resource protection while still providing for anticipated DOE mission needs. These modifications include changing all Conservation (Mining and Grazing) designations to Conservation (Mining) and extending the national wildlife refuge designation (from the Environmentally Preferable Alternative, Alternative One) to include the entire geographic areas of the Wahluke Slope, the Columbia River islands not in Benton County, the Riverlands, the McGee Ranch, and the ALE Reserve. Future individual project land-use requirements would be irreversible and irretrievable committed through appropriate NEPA or, NEPA, CERCLA, or RCRA integrated processes as described in Chapter 6 of the HCP EIS. DOE's decision is detailed by geographic area as follows:

The Wahluke Slope. The Wahluke Slope is currently managed under a 1971 permit by both state and Federal agencies for DOE. DOE will continue a permit arrangement for management of the Wahluke Slope. The Wahluke Slope has been administered for wildlife and recreation as the Saddle Mountain National Wildlife Refuge and the Wahluke Wildlife State Recreation Area under permits granted by DOE to the USFWS and WDFW, respectively. Section 2 of the 1971 permit allows the USFWS and WDFW to adjust their respective management responsibilities and boundaries on the Wahluke Slope as long as they notify the Department within thirty days of such adjustment. In accordance with that provision, in April 1999, the WDFW and the USFWS notified DOE of their intent to modify their management responsibilities on the Wahluke Slope, leaving only a small portion (about 324 ha [800 ac]) northwest of the Vernita Bridge under WDFW management. In August 1999, USFWS notified DOE that it had taken over management of the entire Wahluke Slope except for those portions retained by the WDFW northwest of the Vernita Bridge. The USFWS informed DOE that it intends to allow essentially the same uses permitted by the State of Washington under the WDFW's management of the Wahluke Slope. Therefore, adjusting the management responsibility for the Wahluke Slope involved only a change in the agency managing the property and did not involve any change in the management activities for the Wahluke Slope.

DOE's Preferred Alternative will allow expansion of the existing Saddle Mountain National Wildlife Refuge as an overlay wildlife refuge within the Hanford buffer zone to include all of the Wahluke Slope, consolidating management of the Wahluke Slope under the USFWS. An overlay wildlife refuge is one where the land belongs to one or more Federal or state agencies, but is managed by the USFWS. Management of the Wahluke Slope by the USFWS as an overlay wildlife refuge is consistent with the 1996 DOI Hanford Reach EIS ROD. That ROD recommended that the Wahluke Slope be designated a wildlife refuge and the Hanford Reach a Wild and Scenic River, and that the wildlife refuge be managed by the USFWS.

The entire Wahluke Slope will be designated Preservation, with the exceptions near the Columbia River as discussed in the Columbia River Corridor section that follows. The major reason for designating this area as Preservation is to provide protection for sensitive areas or species of concern (e.g., wetlands, sand dunes, steep slopes, or the White Bluffs) from impacts associated with intensive land-disturbing activities.

A Comprehensive Conservation Plan for the Wahluke Slope will be developed by USFWS in accordance with the *National Wildlife Refuge System Improvement Act of 1997*. This Act provides significant guidance for management and public use of refuges allowing for wildlife-dependent recreation uses such as hunting, fishing, wildlife observation and photography, and environmental education and interpretation. The USFWS will consult with DOE during the development of this plan to ensure necessary and appropriate buffer zones for ongoing and potential future missions at the Hanford Site. Pursuant to its role as the underlying land owner, and under the terms of the use permit granted to the USFWS, DOE reserves the right to approve or disapprove this plan.

The Columbia River Corridor. The Columbia River Corridor has historically contained reactors and associated buildings to support Hanford's former defense production and energy research missions. Nevertheless, remediation planning documents, public statements of advisory groups, and such planning documents as the *Decommissioning of Eight Surplus Production Reactors* at the Hanford Site (DOE-EIS-0119, December 1991) have resulted in determinations that remediation and restoration of the Columbia River Corridor will return the corridor to an undeveloped, natural condition over a 75-year period. Restrictions on certain activities may continue to be necessary to prevent the mobilization of contaminants, the most likely example of such restrictions being on activities that discharge water to the soil or excavate below 4.6 m (15 ft). Although the Surplus Reactor EIS ROD calls for the reactor buildings to be demolished and the reactor blocks to be moved to the Central Plateau, this action might not take place until 2068 or until a new Tri-Party Agreement milestone is negotiated. As a result, the reactor buildings could remain in the Columbia River Corridor and be considered a pre-existing nonconforming land use into the 50-year-plus planning period addressed by the HCP EIS. The reactor hazards drive DOE to retain an appropriate buffer zone for eventual remediation activities.

The Columbia River Corridor will include High-Intensity Recreation, Low-Intensity Recreation, Conservation (Mining), and Preservation land-use designations. The river islands and a quarter-mile buffer zone will be designated as Preservation to protect cultural and ecological resources. Those islands not in Benton County will be designated Preservation and made available for inclusion in the overlay wildlife refuge. Those islands within Benton County will be designated Preservation, but will not be included in the proposed overlay wildlife refuge at this time. Four sites, away from existing contamination, will be designated High-Intensity Recreation to support visitor-serving activities and facilities development. DOE will allow the B Reactor to be converted into a museum and the surrounding area will be made available for museum-support facilities. The High-Intensity Recreation area near Vernita Bridge (where the current Washington State rest stop is located) will be expanded across State Highway 240 and to the south to include a boat ramp and other visitor-serving facilities. Two areas on the Wahluke Slope will be designated as High-Intensity Recreation for potential exclusive Tribal fishing villages. Six areas will be designated for Low-Intensity Recreation. The area west of the B Reactor will be used as a corridor between the High-Intensity Recreation areas associated with the B Reactor and the Vernita Bridge rest stop and boat ramp. A second area near the D/DR Reactors site will be used for visitor services along a proposed recreational trail as conceptualized on Alternative Three's map. The third and fourth areas, the White Bluffs boat launch, and its counterpart on the Wahluke Slope, are located between the H and F Reactors and will be used for primitive boat launch facilities. A fifth area, near the old Hanford High School, will accommodate visitor

facilities and access to the former town site and provide visitor services for hiking and biking trails that could be developed along the Hanford Reach. A sixth site, just north of Energy Northwest (formerly known as Washington Public Power Supply System), will also provide visitor services for recreational trails (e.g., hiking and biking) along the Hanford Reach. On the Wahluke Slope side of the Columbia River, the White Bluffs boat launch will remain managed as is, with a Low-Intensity Recreation designation. A Low-Intensity Recreation designation for the water surface of the Columbia River will be consistent with current management practices and the wishes of many stakeholders in the region. The remainder of land within the Columbia River Corridor outside the quarter-mile buffer zone will be designated for Conservation (Mining). This designation will allow for DOE-permitted sand, gravel and basalt mining activities and support BLM's mission of multiple use. Sand, gravel and basalt mining will be permitted only in support of governmental missions or to further the biological function of wetlands (e.g., conversion of a gravel pit to a wetland by excavating to groundwater). A Conservation (Mining) designation will allow DOE to provide protection to sensitive cultural and biological resource areas, while allowing access to geologic resources. A Preservation land-use designation for the Columbia River islands is consistent with the DOI's Hanford Reach EIS ROD and will provide additional protection to sensitive cultural areas, wetlands, flood plains, three federally listed stocks of anadromous salmon and steelhead, and bald eagles from impacts associated with intensive land-disturbing activities. Remediation activities will continue in the 100 Areas (i.e., 100-B/C, 100-KE, 100-KW, 100-N, 100-D, 100-DR, 100-H, and 100-F), and will be considered a pre-existing, nonconforming land use in the Preservation land-use designation.

The Central Plateau. The Central Plateau (200 Areas) geographic area will be designated Industrial-Exclusive. An Industrial-Exclusive land-use designation will allow for continued Waste Management operations within the Central Plateau geographic area consistent with past NEPA, CERCLA, and RCRA commitments that have established numerous waste management treatment, storage and disposal facilities such as, low-level waste burial grounds, hazardous wastes burial grounds, transuranic treatment and storage facilities, liquid wastes treatment, storage and disposal facilities, transuranic separation facilities, isotopic separation facilities, vitrification facilities, etc. This designation will also allow expansion of existing facilities or development of new compatible facilities. Designating the Central Plateau as Industrial-Exclusive will be consistent with the Hanford Future Site Working Group's 1992 recommendations, current DOE management practice, other governments' recommendations, and many public stakeholder values throughout the region.

All Other Areas. Within the All Other Areas geographic area, the Preferred Alternative will include Industrial, Research and Development, High-Intensity Recreation, Low-Intensity Recreation, Conservation, and Preservation land-use designations. The majority of the All Other Areas will be designated Conservation (Mining) to support a possible BLM mission of multiple use and sand, gravel and basalt mining for DOE and other governmental purposes such as facility aggregate, road aggregate, remediation backfill, remediation cover materials, etc.

Several areas that will be designated as Conservation (Mining) will be unable to fulfill the designated land use, such as:

- A Notice of Deed Restriction has been placed in those areas where vadose zone contamination remained in-place, according to the CERCLA ROD or RCRA Closure Permit (e.g., the Horn Rapids Landfill asbestos trench, Central Waste Complex asbestos trench, 183-H Solar Basins, etc.), foreclosing the sand, gravel and basalt mining option. New areas may be restricted as new CERCLA RODs or RCRA Closure Permits are completed.

Other land-use designations will further define how the All Other Areas will be managed. These designations and the areas affected are as follows:

- Two distinct areas, one located east of the 200 Areas (i.e., May Junction) and the other located north of Richland, will be designated for Industrial use to support new DOE missions or economic development. This designation will provide additional industrial development and/or expansion area for current facilities.
- An area west of State Highway 10 and east of State Highway 240 will be designated for Research and Development (R&D) to support economic diversification and DOE's Energy Research mission. This area will allow for the development of R&D facilities, such as LIGO, which could require substantial buffer zones for operation. In addition, R&D facilities not requiring large areas for operation will also be located within this area.
- A small area at the junction of State Highway 10 and State Highway 240 will be designated High Intensity Recreation to allow for visitor serving facilities at the gateway to the Hanford Reach, ALE, Horn Rapids Park and other recreational areas.
- Gable Mountain, Gable Butte, the area west of State Highway 240 from the Columbia River across Umtanum Ridge to the ALE Reserve, and the active sand dunes areas will be designated for Preservation, which will provide additional protection of these sensitive areas. The extant railroad grade across the Riverlands area will be considered an active permitted infrastructure to clarify its status with respect to policy section 6.3.5. *Utility and Transportation Corridors* in the Final HCP EIS.

The Fitzner/Eberhardt Arid Lands Ecology Reserve (ALE Reserve): All of the ALE Reserve will be included in the proposed overlay wildlife refuge. Nearly all of the ALE Reserve geographic area will be designated as Preservation. This designation is consistent with current management practices of the Rattlesnake Hills Research Natural Area and the USFWS permit. A portion of the ALE Reserve will be managed as Conservation (Mining) during the remediation of the Hanford Site. This basalt and soil mining area was identified to DOE by several parties as an alternative minerals materials location during discussions with the cooperating agencies and after public comment. The ALE site was identified as a suitable area in Appendix D of the HCP EIS that could fulfill DOE's requirement for remediation materials while preserving a wildlife corridor through the McGee Ranch area where suitable soils had been identified, while concurrently preserving basalt outcrops where both biological and cultural resources were at risk.

BASIS FOR THE DECISION

DOE has considered the environmental and other relevant concerns presented by cooperating agencies and consulting Tribal governments, organizations, officials, and individuals on the proposed action to establish a CLUP for the Hanford Site.

DOE has decided to implement the DOE Preferred Alternative land-use map that is shown in Figure 3-3 of the Final HCP EIS, along with the land-use designations and CLUP policies and implementing procedures that are described in Chapter 6 of the Final HCP EIS. DOE's selection and implementation of the Preferred Alternative allows DOE to most effectively balance the elements of each of its four principal missions (National Security, Energy Resources, Environmental Quality, and Science) that have been assigned by DOE to the Hanford Site, while considering the diverse interests of cooperating agencies, consulting Tribal governments, organizations, officials, and individuals in Hanford Site resources. From DOE's perspective, the Preferred Alternative balances DOE's cleanup mission, economic development mission, and natural resources trustee mission to a greater extent than do any of the other Alternatives considered.

Designation of the Wahluke Slope and the Columbia River Corridor buffer zone and river islands for Preservation, and the expansion of the wildlife refuge, are consistent with the DOI ROD for the Hanford Reach EIS, allowing DOE to meet its natural resource trustee mission and safety and buffer zone needs, while protecting cultural resources, sensitive areas and species of concern, and providing for increased High-Intensity and Low-Intensity Recreation in the Columbia River Corridor. The designating of the major portion of the ALE Reserve for Preservation and allowing the incorporation of the ALE Reserve in the proposed wildlife refuge is consistent with current management practices and allows DOE to protect biological and cultural resources. The DOE Preferred Alternative provides for a wildlife corridor through the McGee Ranch, while also allowing DOE to obtain geologic resources at ALE for use in site remediation activities. Designation of the major portion of these areas of the Hanford Site for Preservation allows DOE to more effectively protect the biological, cultural, and aesthetic resources in these areas than would designating the major portion of these areas for Agriculture, Conservation (Mining), Conservation (Mining and Grazing) or Low-Intensity or High-Intensity Recreation, as in Alternative Three. Pursuant to its role as underlying land owner, and under the terms of the use permits granted to the USFWS, DOE reserves the right to approve or disapprove all USFWS management plans for these areas.

The designation of the Central Plateau for Industrial Exclusive use is consistent with its current management and operation and allows DOE to continue Waste Management operations in this area of the site and to expand existing facilities or develop new facilities to meet future mission needs. The designation of the All Other Areas of the Hanford Site to include Industrial, Research and Development, High-Intensity Recreation, Low-Intensity Recreation, and Conservation (Mining) is consistent with a possible BLM multiple-use mission; it lets DOE meet current and future Science missions while allowing economic development in the eastern and southern portions of the site, and recreational access to the Columbia River, and it assures protection of sensitive areas including Gable Mountain, Gable Butte, and active sand dune areas.

The No-Action Alternative fails to implement regional planning with the cooperating agencies and fails to provide DOE with a systematic process to ensure that DOE lands are put to their highest and best use.

DOE did not select Alternative One, which is the environmentally preferable alternative, primarily because DOE considers the amount of area that would be designated for Low- and

High-Intensity Recreation, Conservation (Mining) and Industrial and Research and Development land use under Alternative One to be too limited to allow DOE to effectively meet its current Hanford Science and Technology mission or economic development mission. Furthermore, the DOE Preferred Alternative reserves space and infrastructure to support potential National Security and Energy Resources missions. The shoreline and islands of Benton County that are included in Alternative One's proposed wildlife refuge boundary are not included in the Preferred Alternative because they are still subject to planned remediation activities and are not yet appropriate to be included in a national wildlife refuge.

DOE selected the Preferred Alternative over Alternative Two primarily because DOE considers the amount of area that would be designated for Low-Intensity Recreation, High-Intensity Recreation, Industrial, and Research and Development land use under Alternative Two to be too limited to allow DOE to effectively meet its current Hanford Science and Technology mission or economic development mission. In Alternative Two, Conservation (Mining) is absent as a land use which would restrict DOE from using existing site sand, gravel and basalt resources needed for site activities such as remediation, road building, and building foundations. Furthermore, the DOE Preferred Alternative reserves space and infrastructure to support potential National Security and Energy Resources missions. One of the implicit consumptive uses associated with the Alternative Two's reserved treaty rights (e.g., grazing) conflicted with a strongly expressed stakeholder value not to allow grazing on the Hanford Site.

Alternative Three provides DOE with appropriate Industrial, Research and Development, and Industrial Exclusive areas to effectively meet its current Hanford Science and Technology mission or economic development mission. Furthermore, Alternative Three reserves space and infrastructure appropriate to support potential DOE National Security and Energy Resources missions. However, Alternative Three does not adequately address DOE's resource trustee mission. The DOE Preferred Alternative designates the major portion of the Hanford Site for Preservation, allowing DOE to more effectively protect the biological, cultural, and aesthetic resources than would be possible under the Agriculture, Conservation (Mining), Conservation (Mining and Grazing), Low-Intensity or High-Intensity Recreation designations presented in Alternative Three.

Alternative Four provides less area for Low-Intensity Recreation, High-Intensity Recreation, Industrial, Research and Development, and Conservation (Mining) than does the Preferred Alternative. The area reserved for Conservation (Mining) is appropriate for gravel resources, but not for fine soils or basalt. DOE selected the Preferred Alternative over Alternative Four primarily because DOE considers the amount of area that would be designated for Low-Intensity Recreation, High-Intensity Recreation, Industrial, and Research and Development land use under Alternative Two to be too limited to allow DOE to effectively meet its current Hanford Science and Technology mission or economic development mission. Additionally the DOE Preferred Alternative reserves space and infrastructure to support potential National Security and Energy Resources missions. One of the implicit consumptive uses associated with the Alternative Four's reserved treaty rights (e.g., grazing) conflicted with a strongly expressed stakeholder value to not allow grazing.

CONCLUSION

DOE has considered the environmental and relevant concerns presented by the cooperating agencies and tribal governments, organizations, officials, and individuals on the proposed action to establish a CLUP for the Hanford Site. DOE has decided to implement the DOE Preferred Alternative map with stated land-use designations and implementing policies and procedures as presented in Chapter 6 of the HCP EIS.

Dated: November 2, 1999 Carolyn L. Huntoon

Assistant Secretary for Environmental Management

U. S. Department of Energy