

CHAPTER 2

2.0 ALTERNATIVES INCLUDING THE PROPOSED ACTION

The alternatives for the sale and redevelopment of approximately 1,400 acres of MSR land and associated infrastructure are described in this chapter. Five Action Alternatives are evaluated in detail, along with the No Action Alternative. This chapter includes a description of these alternatives, a comparison of the alternatives and a summary of the potential environmental effects of implementing each alternative. The last section in this chapter identifies TVA's Preferred Alternative.

This final EIS contains a new Action Alternative and the definitions of Alternatives B through E have been changed somewhat from those in the draft EIS. Based on comments received on the draft EIS (see Appendix B), many readers misunderstood the Action Alternatives presented in the draft EIS and believed that TVA would actually restrict or limit future land uses under the Action Alternatives mentioned (e.g., Alternative C would only allow development for commercial, retail, and residential uses). In fact, an element common to all of the Action Alternatives presented in the draft EIS was that TVA would not allocate any MSR land for particular uses; those decisions would instead be determined under the Master Plan. The uses associated with each of the Action Alternatives were intended to be likely scenarios of the types of development that could occur in the future, rather than imposed uses. Regardless of the intent, the comments TVA received on the draft EIS made clear that the public misinterpreted this fundamental aspect of the Action Alternatives. In response to this misunderstanding, TVA has modified its Action Alternatives. Action Alternatives B through E now impose specific use requirements on MSR lands that TVA sells. TVA has also added a new Action Alternative (Alternative F, Unrestricted Land Use Alternative) that represents a future sale of the MSR study area without a requirement for any particular future land use. These changes in the alternatives are described in more detail below.

2.1 Alternatives

TVA proposes to dispose of approximately 1,400 acres of its MSR to allow redevelopment of the property by others. The MSR study area is surrounded by the cities of Sheffield, Muscle Shoals, Tuscumbia, and Florence. Redevelopment of the centrally located MSR study area, for the purposes of adjacent community growth and development, could reduce the need for the development of greenfield sites which would likely result in greater environmental impacts. TVA supports sustainable land uses, low-impact development (LID) (<http://www.epa.gov/owow/NPS/lid/>), and planning that promotes the smart growth goals of these cities. The proposed redevelopment would likely utilize the existing infrastructure and road systems and promote the development of a site that does not presently contribute directly to the tax bases of the local municipalities.

The six alternatives described below are intended to address a reasonable range of likely future land uses of the MSR study area. In this EIS, TVA evaluated the potential direct, indirect, and cumulative effects of disposal and redevelopment on resources in the development impact area and compared those anticipated effects. The Master Plan, being developed in concert with local governments and public input, would eventually be used under all of the Action Alternatives to guide the actual on-site development of the MSR study area.

The alternatives evaluated in this EIS include a No Action Alternative and five Action Alternatives. Under Alternative A, the No Action Alternative, TVA would not dispose of the MSR study area but would continue to use this part of the MSR for program purposes and potential development opportunities consistent with the 1996 Plan. Under the five Action Alternatives (Alternatives B, C, D, E, and F), TVA would declare the 1,400-acre MSR study area unnecessary to carry out future business plans and projects and would dispose of it for future development (see Section 1.3). It is TVA's intent to sell all of the 1,400-acre study area (with the exclusions as noted in Figure 1-2), although the sale may occur through multiple sales of portions of the area rather than through one sale of the entire area. TVA's preference would be to sell the property as a whole to a single buyer or entity. Under any of the Action Alternatives, TVA would dispose of and make available for sale the entire property but would consider selling it over time in parcels of presently unknown size or location.

For various reasons, including potential engineering or environmental constraints and economic drivers, some portion(s) of the property may not attract a buyer. If the entire property is not sold or transferred to a single purchaser initially, TVA will continue to manage any retained or unsold parcels in accordance with the 1996 Plan and may utilize these parcels in the interim during the anticipated 20-year plus development build-out period. TVA will continue to reexamine and evaluate its needs on the Reservation through regular and routine business planning and consider the unsold parcels while continuing to recognize their value and development potential. During its evaluations, TVA would consider among its objectives for the remaining property both adequate space for any expansion of TVA operations and the optimization of economic development in the area. Interim uses would likely represent ongoing TVA uses consistent with the 1996 Plan for the property, but they might also include other public or private uses or partnerships in accordance with specific use agreements, consistent with the Master Plan.

Under the Action Alternatives, the MSR study area would likely be sold at public auction in accordance with Section 31 of the TVA Act and would be developed in accordance with guidelines described in the Master Plan. The sale would not include the phosphate slag storage area, which may be made available by easement for a utility corridor only. TVA would also consider potential transfers of the property to other federal agencies, as appropriate and as consistent with the Master Plan. Under any of the Action Alternatives, TVA anticipates an approximate 20-year plus development build-out of this property.

Four of the Action Alternatives vary by the type of post-sale land uses required. These land uses range from conservation and LID uses under Alternative B to commercial, retail, and residential uses under Alternative C to industrial uses under Alternative D. Alternative E involves a required mixture of the land uses included under Alternatives B, C, and D above and generally described below. Under Alternative F, TVA would sell the 1,400-acre MSR study area with no particular required future land use. Although TVA would not require a particular type of future land use or uses under Alternative F, it is reasonably foreseeable that the property would be developed for one or more of those uses described in Action Alternatives B, C, D, and E. TVA believes that the property would likely be developed for mixed or multiple types of uses. Under any Action Alternative, the property would be subject to restrictions that are necessary to protect historic properties, mitigate other potential environmental impacts, protect TVA's statutory, programmatic, and other interests, and ensure continued ongoing operational requirements (see elements common to all Action Alternatives in this section).

If the TVA Board of Directors, or its designee, selects one of the Action Alternatives, the property would be transferred from federal ownership. Subsequent to its disposal, the property would be subject to local governmental provisions, including annexation, taxation, and other appropriate regulation.

TVA and/or the NACD would lead the development of the Master Plan and help facilitate further community involvement in the project. Under all the Action Alternatives, the Master Plan would be relied on to guide future land use decisions. Key considerations in developing the Master Plan would include appropriate site capability and suitability analyses and the avoidance of valued natural resources and incompatible land uses. The environmental information summarized in this EIS would be a key input to the process of developing the Master Plan. The Master Plan would be implemented by local governments, through zoning or other available means. Cooperation of the developer (the new owner) within the context of these guidelines is expected.

The following elements are common to all Action Alternatives:

1. Due to naturally occurring radiation inherent to the slag, TVA would make the land in the vicinity of the phosphate slag storage area available only as a utility corridor for construction, maintenance, and operation of utilities or other support facilities or infrastructure to the Tennessee River. No development of occupied facilities, such as housing, would be allowed. Currently, access to the phosphate slag storage area is restricted and limited to less than 500 hours per year per person; however, the area is suitable for infrastructure enhancements potentially necessary for development that could locate south of Reservation Road. TVA would not transfer this land for future development but would make it available under specific use agreements, such as easements. Because of environmental and reservoir operations constraints along the adjacent (south) bank of the Tennessee River, TVA would not approve a barge terminal, commercial dock, or other similar shoreline facility.
2. TVA would encourage the adaptive reuse of existing buildings and structures including those that possess historical values. Historic buildings and structures eligible for the NRHP and effects of future uses are addressed in a memorandum of agreement (MOA) with the State of Alabama to mitigate the potential loss of such properties or their eligibility. Such mitigation includes imposition of architectural controls and design guidelines on new owners and consideration of these properties in the Master Plan. TVA would adhere to required measures through inclusion of requirements in the transfer deed(s).
3. As a result of contaminants (e.g., lead paint, asbestos) potentially present in existing buildings and structures, including those that possess historical values, future remedial actions may need to be taken prior to or in the course of reuse or demolition of such buildings and structures. From the perspective of potential human exposure to contaminants, vacant buildings on the MSR study area have not been thoroughly assessed for the safety of future occupants. Prior to the transfer of buildings from federal ownership under any of the Action Alternatives, TVA would assure that any required environmental due diligence assessments on existing building interiors (i.e., construction materials) are completed.
4. TVA would retain the four SWMU areas that are being managed under the current RCRA postclosure permit. Under the ADEM RCRA Permit, these four SWMU areas

have long-term monitoring requirements and restrictions on use. In addition, TVA would retain in the deed, transfer, or other conveyance document access rights necessary for the purpose of meeting these long-term monitoring requirements and conducting groundwater monitoring and visual inspections of these areas.

5. Approximately 17 acres of land has been remediated (i.e., cleaned up) to industrial screening levels. No land within the area covered by the existing RCRA Permit (2,260 acres), which includes these 17 acres, would be sold or transferred from federal ownership unless the land is conveyed at the unrestricted use level or with the appropriate environmental covenants and restrictions in the deed, transfer, or other conveyance document.
6. TVA would not allow removal of groundwater for drinking water (i.e., potable use purposes) from anywhere on the MSR study area. Furthermore, TVA would advise potential buyers that, prior to construction of enclosed structures, soil gas data should be collected from above the water table in areas of historical volatile organic compounds (VOCs) contamination of groundwater to determine if a pathway for vapor intrusion is present.
7. TVA would only dispose of land within the limits of the 100-year floodplain with a covenant in the deed, transfer, or other conveyance document requiring that any proposal for future use be subject to TVA review and approval under Section 26a of the TVA Act prior to construction. Any proposals that would affect floodplains would be evaluated in accordance with Executive Order (EO) 11988.
8. TVA would only dispose of federal wetlands with a covenant in the deed, transfer, or other conveyance document requiring that any proposal for future use, whether or not they fall under TVA's Section 26a jurisdiction, would be subject to TVA review and approval prior to the placement of fill or construction. Such proposals would be evaluated in accordance with EO 11990.
9. A Master Plan would be produced by TVA, NACD, and/or other appropriate local, state, or federal authorities, with public input, to guide land use development in accordance with deed restrictions and applicable local laws, regulations, and ordinances. TVA would assure development of and ultimately approve the Master Plan.
10. License agreements with TVA would be canceled prior to transfer of the property, but a new owner(s) may choose to continue those uses under new licenses or agreements.
11. A 1-mile segment of the paved National Recreation Trail Complex extending south of Reservation Road could be affected by future development under any of the Action Alternatives. Therefore, prior to any transfer of the affected land from federal ownership, TVA would consult with ALDOT and FHWA to obtain the needed written authorization. A prorated share of revenues would also be dispersed to these agencies as appropriate upon sale of the affected property.
12. TVA would include in any deed, transfer, or other conveyance document any such restrictions, conditions, and covenants deemed necessary to protect TVA's statutory, programmatic, and other interests.
13. Under any of the Action Alternatives, the remaining 1,640 acres of Muscle Shoals/Wilson Dam Reservation land outside the MSR study area would continue to be managed by TVA in accordance with the 1996 Plan.

14. Under all the Action Alternatives, TVA would encourage inclusion of all segments of the population representative of the Muscle Shoals community and Colbert and Lauderdale counties to participate in the comprehensive master planning process to help assure equitable distribution of the benefits from development of the Reservation property.

2.1.1 Alternative A – The No Action Alternative

Under the No Action Alternative, TVA would not declare the MSR study area surplus to its needs. The property would not be sold or transferred but would remain in federal ownership under the custody and control of TVA. If Alternative A were selected, TVA would continue to manage the property in the MSR study area and utilize portions for program purposes and regional economic development partnerships consistent with the 1996 Plan allocations unless and until it is superseded by another plan at some future time. If other future land sales, transfers, or disposal actions were considered by TVA, those actions would require independent environmental reviews at that time.

TVA would likely continue its current invasive species removal plan for control of invasive plant species on the Reservation and would allow The American Chestnut Foundation (TACF) research to continue. Visual buffers established along roads and trails and the vegetative buffer established along the Pond Creek corridor would remain. There would be no change in the public recreation and open space presently available on the Reservation north of Reservation Road. Although TVA would continue its required monitoring program, the potential for existing solid and hazardous waste facilities to impact groundwater would continue. Because current land uses would likely remain the same, hazards to people from exposure to contaminants are not expected to change. Agricultural use licenses over approximately 182 acres of land on the MSR study area would likely continue in accordance with their terms. The land use allocations shown in Figure 2-1 would remain unchanged and in effect under Alternative A.

2.1.2 Alternative B – Conservation Alternative

Under Alternative B, TVA would declare the 1,400-acre MSR study area surplus to its needs and sell it with the requirement that it be used in the future only for conservation of natural resources and/or for sustainable LID. Other types of land uses, such as heavy industry, residential development, and commercial development, would not be allowed.

Types of LID likely under this alternative include those that generate minimal waste streams and have a small environmental footprint. Thus, the reuse of existing buildings and infrastructure would be preferred over new construction under this alternative. Likewise, any new construction would occur preferably on previously disturbed sites (brownfield sites) or impervious surfaces rather than on “greenfield” sites. TVA would encourage any new construction to incorporate green building principles, i.e., Leadership in Engineering and Environmental Design Certification, green infrastructure or LID (<http://www.usgbc.org/>), perhaps through its involvement in the Master Plan development process.

Under this alternative, some natural resources could be integrated into an overall conservation theme. This could involve inclusion of some land with valued resources, such as streams, floodplains, wetlands, woodlots, and grasslands, into areas of future parks, visual or noise buffers, or green space. On-site developments including new building and construction such as office or business complexes, educational institutions, or light industry (i.e., tertiary and quaternary industry -- see general description in Section 2.1.4) could incorporate LID practices into their integrated design. This could include development site

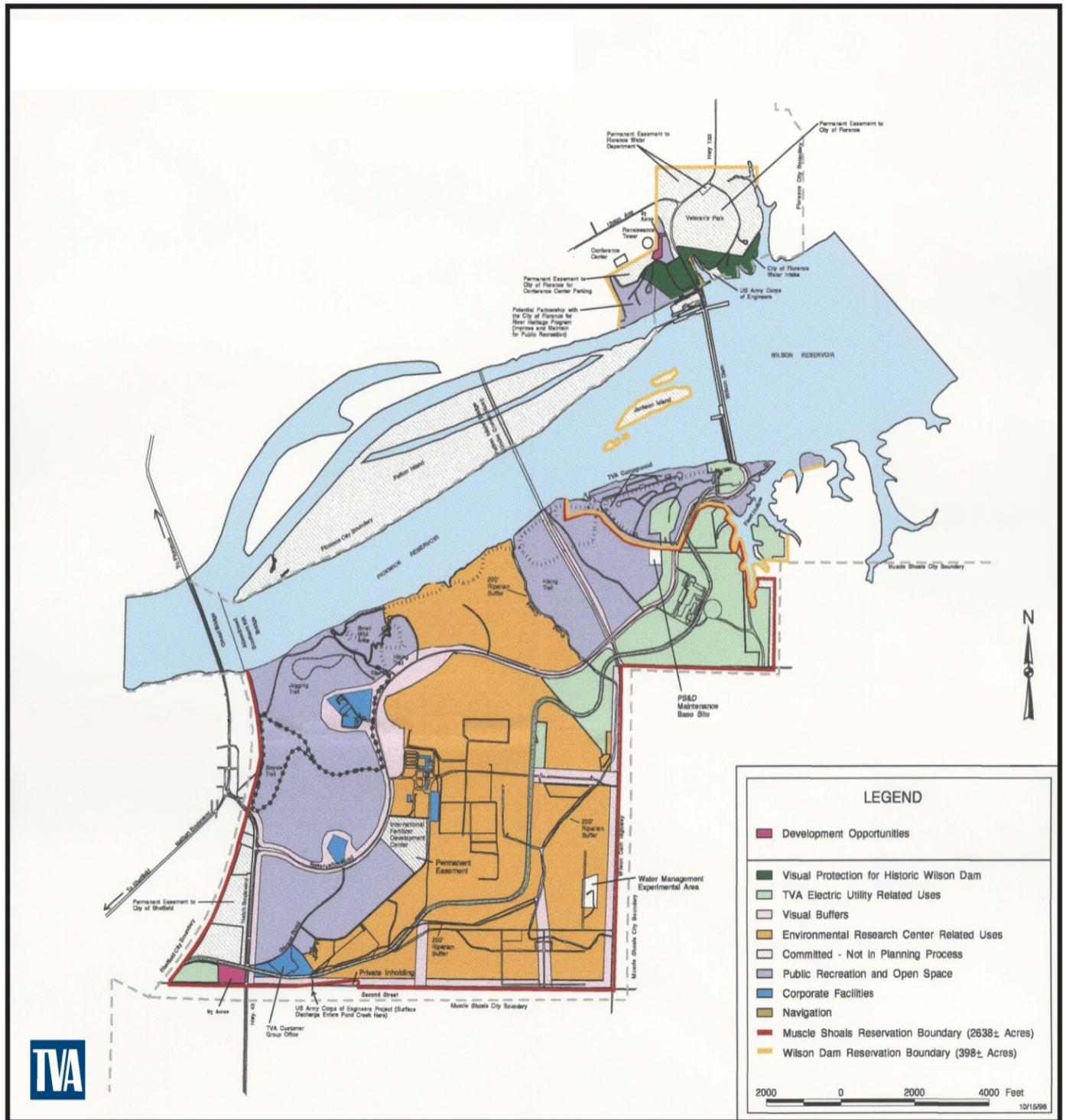


Figure 2-1. Land Allocations in the 1996 Muscle Shoals/Wilson Dam Reservation Land Use Plan

planning, hydrological analysis, integrated management, sediment and erosion control, and public outreach.

See Section 2.1 for the elements common to all the Action Alternatives. These elements include special provisions, commitments, directives or mitigation measures that TVA would assure are implemented regardless of the Action Alternative chosen.

Typical examples of future land uses under this alternative could include:

- Recreation opportunities including parks, greenways, and trails
- Nature and historic interpretation
- Open green space
- Wildlife viewing and management
- Botanical gardens
- Nursery and horticultural production areas
- Green energy research and development
- Environmental education
- Ecotourism

Uses would be focused on the types of sustainable development known to be compatible with existing resources and other environmental amenities that occur on or near the MSR study area, including historic buildings and structures, fields and forests, wetlands, and wildlife and their habitats.

Under Alternative B, there would likely be more open green space than developed areas. Conservation and recreation uses that currently occur on the property including wetlands, floodplains, wildlife habitat, farmland, TACF Research Orchard, Pond Creek, nature trails, birding, and other green space areas would likely remain under this alternative. Invasive species such as kudzu and Chinese privet that dominate understory vegetation in some areas could be controlled by continuing partnerships with local volunteers.

2.1.3 Alternative C – Commercial, Retail, and Residential Alternative

Under Alternative C, TVA would declare the 1,400-acre MSR study area surplus and sell it with the requirement that it be used in the future only for a mixture of commercial, retail, and residential uses. Other uses (e.g., heavy industrial uses) would be prohibited.

See Section 2.1 for the elements common to all the Action Alternatives. Typical examples of future land uses likely under this alternative could include:

- High-density businesses
- Malls
- Theaters
- Government buildings
- Health care institutions and medical facilities
- Restaurants
- Department stores
- Convenience stores
- Car washes
- Gas stations
- Miniwarehouses or self-storage buildings

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- Residential buildings and structures
- Retail shopping center developments
- Community centers
- Religious and educational institutions

Uses might also include lower-density commercial recreation facilities such as resorts, athletic fields, stadiums, campgrounds, fairgrounds, and parks.

Various types of home sites and residential developments from lower-density, single-family residential-dwelling types to high-density multifamily (e.g., duplexes, townhouses, condominiums, and apartments) dwellings would be considered appropriate under this alternative. Depending on the extent of on-site development, expansion of existing infrastructure (i.e., electric, water, sewer, or gas lines, and roads) could be necessary.

Under Alternative C, most of the MSR study area is suitable for commercial, retail, and residential uses. Consequently, it could take on a suburban or urban character.

2.1.4 Alternative D – Industrial Alternative

Under Alternative D, TVA would declare the 1,400-acre MSR study area surplus to its needs and sell it with the requirement that it be used in the future only for industrial development purposes. Other uses, including residential, commercial, retail, and conservation, would not be allowed. See Section 2.1 for the elements common to all the Action Alternatives.

Industry can be generally defined as any type of economic activity producing goods or services for consumers. It is generally part of a chain—from raw materials to finished product, finished product to service sector, and service sector to consumer. Types of industry include primary, secondary, tertiary, and quaternary. Primary industry generally involves obtaining raw materials or securing natural resources and includes such activities as quarrying, mining, growing (farming), forestry (harvesting), or aquaculture (fishing).

Secondary industry generally involves producing a product from primary industry that is processed or manufactured into another product. Examples of processing of raw materials (where raw materials are changed into something different) include milling metals from ores, refining oil, meat processing, lumber milling, metal fabrication, wheat or corn processing, and road and home construction.

Tertiary industry provides a service. It can involve a wide range of services instead of making a product. Typical examples of service industries include distribution and transportation; construction; processing and packaging of goods; and various institutional and government services such as civil service, educational administration, and fire and police protection.

Quaternary industry generally involves a small group of research and development industries. It is considered the newest industrial sector (often linked with tertiary) and is growing rapidly due to developments in information technology and communication. Research and development focuses on ideas for new products and improvements to existing ones. It focuses on the latest technology, and examples include designing new computers, researching new medicines and medical equipment, genetically modifying plants and animals for farming and other purposes, new forms of communication through

satellites and fiber optics, and green technology and other energy research and development.

Although primary industrial use is much less likely to occur on the MSR study area because of the lack of exploitable resources, potential environmental constraints, and public opposition, any of the types of industrial uses described above could occur on the property at some future time at any location. Depending on the extent of on-site development, expansion of existing utility infrastructure (i.e., electric, water, sewer, or gas lines, and roads) could be necessary. Under Alternative D, the utility corridor, designed to accommodate this infrastructure, would have a greater probability, particularly as compared to Alternatives B and C, of being needed to support the industries located on the south side of Reservation Road.

All land within the MSR study area could be used for industrial purposes, including the utility corridor (see Section 4.1.1). Under this alternative, the amount of land actually used or required by future industries could vary from a few hundred acres to the entire MSR study area. Depending on the number of industries and the extent of industrial development, the character of the MSR study area could range from that of a maintained open area with some industrial development to that of an industrial park.

2.1.5 Alternative E – Mixed Use Alternative

Under Alternative E, TVA would declare the 1,400-acre MSR study area surplus to its needs and sell it with the requirement that it be used for a mixture of the following uses:

- Conservation and sustainable LID
- Commercial, retail, and residential uses
- Industrial uses

Potential site development under this alternative would generally include the mixture of land uses described under Alternatives B through D above. Because a singular use would be required under Alternatives B and D, conservation and LID and industrial development, respectively, would likely be accommodated in proportionally smaller areas under Alternative E. Similarly, commercial, retail, and residential land use would also likely be proportionally less than under Alternative C. Because of the likelihood of a variety of well-planned land uses and potentially extensive use of the MSR study area, expansion of existing utility and transportation infrastructure (i.e., electric, water, sewer, or gas lines, and roads) could be necessary. This could include use of the utility corridor in the vicinity of the phosphate slag storage area. See Section 2.1 for the elements common to all the Action Alternatives.

2.1.6 Alternative F – Unrestricted Land Use Alternative

Under Alternative F, TVA would declare the 1,400-acre MSR study area surplus and dispose of the property without land use restrictions other than those designed to protect TVA's program interests or to meet legal or environmental requirements (see elements common to all Action Alternatives in Section 2.1). TVA would not specify that land on the MSR study area be used for a particular purpose, but instead would allow future uses on the property to be driven by environmental resources and constraints taken into account in development of the Master Plan and subsequent local zoning laws or other appropriate land use ordinances.

Under this alternative, the future uses of the property are likely to be a combination of those uses described in Action Alternatives B, C, D, and E. Although TVA would not require a particular type of land use or uses under Alternative F, the property would be used or developed for one or more of those reasonably foreseeable uses. Based on varied suitable uses of the property, market conditions, potential resource conflicts, the sample conceptual master plan prepared by Lord Aeck Sargent, public comments received on the draft EIS, and other relevant information, the most likely future use of the property appears to be a mixture of uses similar to those reflected in Alternative E. Thus, those same uses would likely occur under Alternative F even in the absence of a specific deed provisions requiring such uses.

2.2 Comparison of Alternatives

Regardless of the alternative selected, some resources would not be directly adversely affected by the proposed land sale and subsequent development. However, other resources would likely be affected directly or indirectly in a minor to moderate degree across the range of alternatives. In addition, some resources would be affected, even potentially significantly so, and mitigation could be required to avoid, reduce, rectify, minimize, compensate, or mitigate losses of resources, values, or associated uses. The following paragraphs provide a comparison of effects on various resources and explain how each alternative type of land use development could affect the resource. Table 2-1, which follows the comparison, displays a summary of potential effects by alternative.

Under Alternative A, No Action, the MSR study area would remain in federal ownership, and current land uses are not likely to change for the foreseeable future. Any future proposals for use consistent with the 1996 Plan would likely require additional environmental reviews. TVA would retain and continue to monitor certain SWMU areas and comply with ADEM regulations (see Section 2.1). Management and use of other areas of remnant waste and SWMUs would continue in accordance with applicable regulations including some additional waste stream generation and waste disposal. Groundwater monitoring would continue, and the potential for local effects could continue; however, no off-site impacts are expected. NRHP-eligible historic properties (i.e., buildings, structures, and archaeological sites) would remain in TVA ownership and management, and many would likely remain unused. Some unoccupied buildings and structures could continue to deteriorate and become an environmental or safety concern. No additional socioeconomic benefits would likely be recognized. Land under agricultural use license would probably remain available for sod crop production, thus maintaining some productive use of prime farmland on the Reservation. Because of pollutants entering upstream as well as regulated discharge, surface water quality in Pond Creek would likely remain poor and potentially unchanged. Current recreational opportunities, including birding, walking, jogging, and hiking, would continue to be available on accessible parts of the MSR study area. Vegetation and invasive plant management, and control activities are expected to continue. Environmental amenities such as aquatic life, threatened and endangered species, wetlands, floodplains; visual and naturally appearing landscape character; and terrestrial wildlife and their habitats would generally remain unchanged or continue under present management in accordance with the 1996 Plan. Without some roadway improvements, transportation and related traffic congestion, particularly at major intersections, are expected to grow increasingly worse over the next 20 years (or Action Alternatives build-out period) even under Alternative A. Visual resources would likely remain unaffected, and noise levels could likely gradually increase with corresponding level of traffic.

Under Alternative B, the MSR study area would be sold, and the new owner(s) would be required to use the property for conservation purposes and LID. There would be a deliberate emphasis on protecting and maintaining sensitive resources such as wetlands and historic properties. TVA would continue to manage monitored SWMU areas. SWMUs cleaned up to industrial screening levels could be sold for appropriate development or reuse. Under this alternative, the likelihood of additional on-site contamination from site development is low. With adherence to applicable restrictions, the likelihood of additional exposure to hazardous material would similarly be low. Groundwater extraction from the MSR study area for drinking water usage would be prohibited under this and all the Action Alternatives (i.e., Alternatives B through F). Compared to the other Action Alternatives, the activities and development under this alternative would likely require the least amount of land use change and intensity of development. A greater amount of green space, naturally appearing landscape character, and recreation opportunity, probably substantially more, would be available under this alternative compared to the other Action Alternatives. More emphasis on invasive plant and wildlife habitat could become a management focus. In compliance with Section 106 of the NHPA, adverse effects on archaeological and architectural resources are subject to mitigation under stipulations included in an MOA between TVA and the Alabama SHPO (Appendix A). TVA is encouraging adaptive reuse of certain historic buildings under all the Action Alternatives. The impacts of implementing Alternative B on air quality are expected to be similar to or slightly greater than those likely under Alternative A but less than those expected under Alternatives C, D, E, and F. Implementing Alternative B would have a beneficial effect on the anticipated amount of greenhouse gases (GHG) and any contribution to cumulative global climate change (GCC).

Land use change is expected to be less under Alternative B compared to Alternative C, D, E, or F. Other than the potential for positive quality of life impacts, socioeconomic benefits would likely be minor. Disproportionate impacts to disadvantaged populations would be less than those under Alternative C; they potentially could be greater than the effects likely under Alternatives A, D, E, and F. Current recreational opportunities, including birding, walking, jogging, and hiking, could continue to be available in accessible areas. Vegetation and invasive plant management and control activities are expected to continue.

Areas of wetlands and floodplains would only be developed consistent with EO 11990 and EO 11988 under all the Action Alternatives. Environmental amenities such as aquatic life and threatened and endangered species in the Tennessee River would not be affected. The visually pleasing and naturally appearing landscape character on the study area and terrestrial wildlife and their habitats could generally continue somewhat unaffected in less disturbed areas. The designated natural area (Old First Quarters Small Wild Area [SWA]), as described in Section 4.15, would not be directly affected. Without some roadway improvements, transportation and related traffic congestion would worsen, in some cases significantly, as described under all the alternatives.

Because only conservation and sustainable LID would be allowed under Alternative B, the production of waste streams would likely be less than from implementation of other development alternatives, particularly industries that could locate on the MSR study area under Alternatives D, E, and F. Nevertheless, anticipated uses under Alternative B would likely result in low risks of direct, indirect, or off-site and cumulative impacts.

Under Alternative C, the MSR study area would be sold, and TVA would require that the property be used for commercial, retail, and residential purposes. Some open green space would probably be designed into the landscape; however, industrial uses would not occur.

Development anticipated under Alternative C would generate solid wastes, but the amount of hazardous wastes would likely be minor and the potential for on-site contamination would be low. The opportunity for exposure to remaining on-site contaminants would be greater under Alternative C compared to Alternatives A and B but potentially the same or less than that likely under Alternatives D, E, and F. Mitigation, including the potential for additional cleanup of some previously remediated SWMUs, and the potential for additional evaluation and study would further reduce this potential risk.

Overall, because most of the development would likely be a transfer of locations within the area and would add little new development for outside the area to the overall economy of the area, the potential economic effects under Alternative C would be minor. Because most of the development would otherwise occur elsewhere in the local area, few new employment opportunities for minority or low-income individuals would result; thus, this alternative would likely have the greatest disproportionate impact on those populations. Implementation of Alternative C could likely have greater impacts on land use than Alternatives A and B but less than those expected if Alternative D, E, or F were implemented.

The combination of uses allowed under Alternative C could result in low to moderate risks of direct, indirect, or off-site and cumulative impacts. Under Alternative C, impacts from emissions of pollutants would likely be less than or similar to those likely under Alternatives D, E, and F. However, the combination of commercial, retail, and residential use development would result in greater impacts compared to Alternative B. The potential for use of the utility corridor for construction of utilities or other support facilities or infrastructure would likely be reduced compared to Alternatives D, E, and F but would remain higher compared to Alternative B. It is unlikely that this utility corridor could be needed under Alternative B or C.

Under Alternative D, the MSR study area would be sold with the stipulation that it would be used for industrial purposes. The potential for generation of wastes, including hazardous waste, would likely be greater under Alternative D than under the other Action Alternatives. The likelihood of additional on-site contaminant generation (i.e., waste streams) would likely be highest under this alternative compared to the other Action Alternatives. Because all land within the MSR study area has been extensively investigated and, as appropriate, sampled, assessed, and remediated where necessary to industrial screening levels and because only industrial uses would occur, no additional cleanup would likely be required or anticipated under this alternative. Furthermore, because industrial-type developments would likely provide short-term employee occupancy substantially isolated from soil contact, no increased human health or environmental exposure risks are anticipated.

Because investors (i.e., new money) from outside the area or region could be attracted to the site and the immediate area, implementing Alternative D would likely have the greatest overall economic effects and could result in additional opportunities for growth. Increases in employment and income under Alternative D are likely to be moderate to large. However, under this alternative, there could be some decrease in the overall attractiveness of the area, with a corresponding negative impact on the quality of life due to increased traffic, noise, and congestion and the loss of scenic and recreation opportunities in the area. Overall, disproportionate impacts to minority and low-income individuals would be less than those under Alternatives B and C, but greater than those under Alternative E or F.

Anticipated uses under Alternative D would likely result in moderate to high risks of direct, indirect, and cumulative impacts. These types of uses would likely result in the greatest potential impacts from air, land, and water emissions compared to the other alternatives. Because there would be more site disturbance from construction and some operational effects, industrial development would result in greater overall environmental impacts compared to Alternative B, C, E, or F. The potential for use of the utility corridor for construction of utilities or other support facilities or infrastructure would likely be highest under this alternative compared to anticipated uses under the other Action Alternatives.

Under Alternative E, the MSR study area would be sold with the requirement that it would be used for a mixture of conservation and LID; commercial, retail, and residential; and industrial purposes. This mixture of site development would generate solid waste, and some hazardous wastes could be produced as a result of industrial by-products. However, the generation of large quantities of hazardous waste is not likely, and the potential for additional site contamination from development is relatively low. Mitigation, including the possible need for additional cleanup of some land, and the potential for additional evaluation and study would further reduce this potential risk. Most of the land could be developed for any type of land use and, thus, require no additional cleanup.

Well-designed business and industrial facilities would provide increased income and job opportunities while maintaining and possibly enhancing the overall attractiveness of the area. Increases in employment and income under Alternative E are likely to be moderate. The development activities following adoption of Alternative E would provide a similar increase in employment opportunities for minority and low-income individuals as described under Alternatives C and D. Scenic values and recreation opportunities would continue to contribute to quality of life in the area. Therefore, disproportionate impacts to minority and low-income populations would be smallest under this alternative and likely as well as under Alternative F.

Such development could likely result in moderate to high risks of direct, indirect, or off-site and cumulative impacts. Because there would be more site disturbance from construction and some operational effects, mixed use development under this alternative would result in greater impacts compared to Alternative B. The potential use of the utility corridor for construction of utilities, other support facilities, or infrastructures would likely be similar to Alternatives D and F. Less open green space would likely be retained as compared to Alternative B but potentially more than that likely under Alternatives C and D.

Under Alternative F, the MSR study area would be sold, but no restrictions would be placed on its future land uses. As discussed earlier, under Alternative F, the property would likely be used or developed for one or more of the uses described under Alternative B, C, or D or the mixture of land uses under Alternative E. Therefore, impacts of development under Alternative F are likely to be similar to those described under Alternative E above and the range of effects bounded by those described under Action Alternatives B, C, D, and E.

Table 2-1. Summary of Potential Effects by Alternative¹

Resource Issues	Alternative A (No Action)	Alternative B (Conservation)	Alternative C (Commercial/Retail and Residential)	Alternative D (Industrial)	Alternative E (Mixed Use)
Solid and Hazardous Waste: Zone A ² (approximately 300 acres including monitored SWMUs)	Negligible	Potential indirect beneficial effects if Zone A is used for certain low-impact development	Potentially significant impacts; could require additional remediation for commercial, retail, or residential uses	Minor if used for industrial purposes	Potentially significant impacts; could require additional remediation for commercial, retail, or residential uses
Solid and Hazardous Waste: Zone B (approximately 90 acres at phosphate storage area)	Negligible	Use of utility corridor unlikely under Alternative B; if proposed, project would be evaluated the same as under Alternative D, E, or F	Use of utility corridor unlikely under Alternative C; if proposed, project would be evaluated the same as under Alternative D, E, or F	Potentially significant health effects unless personal exposure is limited to no more than 500 hours per year; if proposed, projects would be evaluated for potential worker exposure	
Solid and Hazardous Waste: Zone C (approximately 1,000 acres where contamination is not known to occur)	Negligible	Minor impacts with low potential for exposure to any remaining contaminants	Minor impacts with low potential for exposure to any remaining contaminants	No increased human health or environmental exposure risks would be anticipated	Minor impacts with low potential for exposure to any remaining contaminants

Resource Issues	Alternative A (No Action)	Alternative B (Conservation)	Alternative C (Commercial/Retail and Residential)	Alternative D (Industrial)	Alternative E (Mixed Use)
		Alternative F (Unrestricted Use)			
Solid and Hazardous Waste: Zone D (approximate 100-foot-by-100-foot area used as a low-level radioactive waste burial site)	Negligible	Impacts minor and similar to those in Zone C unless there is subsurface soil disturbance			
Geology	No changes in existing geological conditions	No impacts likely; development would likely occur in areas where the local geology would be unaffected	Increased potential for groundwater changes; no adverse impacts; development would likely occur in areas where the local geology would be unaffected	No adverse impacts; development would likely occur in areas where the local geology would be unaffected; could possibly result in greater or likely similar impacts as Alternative C	No adverse impacts; development would likely occur in areas where the local geology would be unaffected; less impact to geological resources than Alternative C or D
Groundwater	Minor effects (no evidence of adverse impacts to potential off-site groundwater users or other receptors)	No adverse effects on health and safety; TVA will not allow removal of groundwater for drinking water from anywhere on the MSR study area under any of the Action Alternatives; some potential for contamination from spills or leaks under Alternative D			

Resource Issues	Alternative A (No Action)	Alternative B (Conservation)	Alternative C (Commercial/Retail and Residential)	Alternative D (Industrial)	Alternative E (Mixed Use)
		Alternative F (Unrestricted Use)			
Archaeological Resources	No adverse effects likely	Potential adverse effects to three archaeological sites and two cemeteries; two sites would be mitigated through stipulations in the MOA between TVA and the Alabama SHPO, and one site would be avoided; two cemeteries would be managed in accordance with state law			
Historic Resources (Architecture)	Future undertakings involving historic properties would be evaluated; conditions could worsen	Adverse impacts would be mitigated through applicable stipulations in MOA; adaptive reuse of buildings and structures addressed in agreement			
Socioeconomic Resources	No impact or change in current conditions; any potential benefit would be foregone	Minor impacts with potential quality of life benefits	Small (minor) positive effect	Significant increase in income and employment; impacts could be moderate to large with potentially negative quality of life influence	Potentially significant increase in income and employment; impacts could be moderate with potential quality of life benefits
Environmental Justice	No effects	Potential impacts would be small (minor); any disproportionate impacts would be less than under Alternative C and could be greater than the economic effects likely under	Potential impacts would be small (minor); Alternative C likely would have the greatest disproportionate impacts to minority and low-income populations	Potentially significant positive effects on local income and employment; all segments of population likely to benefit; disproportionate impacts to minority and low-income	Potentially significant increases in regional employment and income; increased employment opportunities for minority and low-income individuals; disproportionate impacts would be smallest under these alternatives

Resource Issues	Alternative A (No Action)	Alternative B (Conservation)	Alternative C (Commercial/Retail and Residential)	Alternative D (Industrial)	Alternative E (Mixed Use)
		Alternative F (Unrestricted Use)			
		Alternatives A, D, E, and F		individuals would be less than for Alternatives B and C, but greater than Alternatives E and F	
Land Use	Possible minor changes in current land use	Some changes; much green space and recreational opportunities likely retained; effects of LID could be further minimized if existing buildings are reused	Minor impacts; could likely have greater changes in land use than Alternatives A and B but less than expected under Alternative D, E, or F	Greater intensity but effects minor impacts in context; similar to those under Alternative C; overall, could have greater impacts than any of the other Action Alternatives	Minor impacts; could likely have greater impacts than Alternatives A and B but could be comparable to or perhaps less than those anticipated under Alternative C or D; effects of Alternatives E and F similar
Air Quality	No additional effects	Minor impacts; less than those associated with Alternative C, D, E, or F	Minor temporary effects from construction activities; potentially greater than Alternative A or B, likely less than Alternative D but similar to Alternatives E and F	Minor, no adverse, impacts with regulation; could be greater than Alternative A, B, C, E, or F	Minor impacts with regulation; potentially greater than Alternative A, B, or C; effects likely less than Alternative D
Global Climate Change	No incremental impacts expected	Increased vegetative cover could sequester carbon dioxide; minor climate change benefit	Increased emissions of greenhouse gases expected; could be greater than expected under Alternative A or B	Increased emissions of greenhouse gases expected; has the greatest potential not only to impact climate but also to be	Increased emissions of greenhouse gases expected similar to that under Alternative C

Resource Issues	Alternative A (No Action)	Alternative B (Conservation)	Alternative C (Commercial/Retail and Residential)	Alternative D (Industrial)	Alternative E (Mixed Use)
		Alternative F (Unrestricted Use)			
		expected if vegetation cover is increased	but less than under Alternatives D, E, and F	impacted by climate change	
Soils and Prime Farmland	No effects	Minor impacts	Minor impacts; higher potential for conversion of farmland to nonfarmland uses compared to Alternatives A and B	Minor impacts; greatest potential for impacts to soils and prime farmland	Minor impacts; similar to those under Alternatives C and potentially less than those under Alternative D
Surface Water Quality	No impacts	No significant impacts; presence of green space would reduce potential for introduction of runoff into surface waters	Minor impacts likely greater than those under Alternatives A and B	No significant impacts; similar to or potentially greater than those anticipated under Alternative C, E, or F	Insignificant impacts, similar but potentially less than those compared to Alternative C or D
Wetlands	No impacts	Minor impacts; least potential for effects among Action Alternatives	Minor impacts; greater potential to affect compared to Alternative A or B	Minor impacts; greater potential to affect compared to Alternative A or B; similar to effects under Alternative C, E, or F	Minor impacts; greater potential to affect compared to Alternative A or B; similar to effects under Alternative C or D
Floodplains	No impacts likely	Low potential for impacts	Minor impacts, potentially greater than effects likely under Alternative A or B	Minor and insignificant effects similar to those under Alternative C	Minor and insignificant impacts, potentially greater effects under Alternative A or B and similar to those expected under Alternative C or D

Resource Issues	Alternative A (No Action)	Alternative B (Conservation)	Alternative C (Commercial/Retail and Residential)	Alternative D (Industrial)	Alternative E (Mixed Use)
	Alternative F (Unrestricted Use)				
Aquatic Ecology - Fish and Aquatic Life	No impacts	No impacts likely	No impacts; potential for effects is greater than Alternative A or B and similar to that under Alternatives D, E, and F	No impacts; potential for effects is similar or slightly greater than those under Alternative C, E, or F	No impacts; potential is similar to Alternatives C and D
Aquatic Ecology - Aquatic Endangered and Threatened Species	No effects				
Terrestrial Ecology - Plants	No significant impacts	Potentially beneficial impacts	Loss of American chestnut orchard research could have significant effects on species restoration in the southern portion of its range; elimination of forested areas could adversely affect habitat capable of supporting two state-listed plants		
Terrestrial Ecology - Wildlife	No effects; no change in current conditions	Potential slight improvement in wildlife habitat and long-term availability of habitats	Minor impacts; local reduction of wildlife diversity; reduced amount and suitability of wildlife habitats compared to Alternative A or B	Moderate impacts; potentially similar to those under Alternative C; greater than those anticipated under Alternatives A and B and potentially similar or greater than those expected under Alternatives E and F	Minor impacts; greater than those under Alternatives A and B; potentially similar to those under Alternative C and less than those anticipated under Alternative D
Terrestrial Ecology - Endangered and Threatened	No effects on federally listed plants or animals	No effects on federally listed plants or animals	Potential negative effects on state-listed plant habitat; potential indirect	Potential negative effects on state-listed plant habitat; potential indirect effects on	Positive or negative effects on state-listed plant habitat could occur; potential indirect effects on federally listed animal habitats and no effects

Resource Issues	Alternative A (No Action)	Alternative B (Conservation)	Alternative C (Commercial/Retail and Residential)	Alternative D (Industrial)	Alternative E (Mixed Use)
		Alternative F (Unrestricted Use)			
Species			effects on federally listed animal habitats; no effects on any federally endangered or threatened animals or plants or designated critical habitat	federally listed animal habitats; no effects on any federally endangered or threatened animals or plants or designated critical habitat	on any federally endangered or threatened animals or plants or designated critical habitat (same as those under Alternative C or D)
Natural Areas	No impacts to any officially designated natural areas				
Recreation	No impacts	Minor potential for loss of recreational use opportunities; among the Action Alternatives, would most likely preserve or increase the amount of open space and areas in a relatively natural character	Potentially significant loss of recreational use opportunities	Potentially significant loss of recreational use opportunities	Minor to moderate loss of recreational use opportunities
Transportation	Significant impacts expected due to increased traffic in the area during build-out to year 2035 under all the alternatives, including No Action				

Resource Issues	Alternative A (No Action)	Alternative B (Conservation)	Alternative C (Commercial/Retail and Residential)	Alternative D (Industrial)	Alternative E (Mixed Use)
		Alternative F (Unrestricted Use)			
Scenic Resources	No impacts likely	Minor impacts; less potential for effects compared to Alternative C, D, E, or F	Minor impacts; potential for effects similar to Alternatives D, E, and F	Minor impacts; potentially greater compared to Alternative B; likely similar to Alternatives C, E, and F	Minor impacts; potentially greater compared to Alternative B; likely similar to Alternatives C and D
Navigation	No impacts; use of the utility corridor is very unlikely	No impacts; use of the utility corridor is unlikely		Minor impacts; potential for effects is greater than under Alternative B, C, E, or F; could increase use of nearby port facilities	Minor impacts; potential for effects is less than under Alternative B, C, or D; could increase use of nearby port facilities
Noise	No impacts	Minor impacts	Minor impacts; potentially greater effects than under Alternative B	Minor impacts; likely greater effects compared to Alternative C, E, or F	Minor impacts; likely less effects compared to Alternative D; similar to Alternative C

¹ See Chapter 4 for discussions of potential indirect and cumulative effects on various resources across the range of alternative land uses.

² TVA would also comply with CERCLA and RCRA, as appropriate.

2.3 Potential Mitigation Measures

Mitigation measures are actions taken to avoid, minimize, rectify, reduce, compensate, or mitigate for adverse impacts to the environment. The following measures would be taken to reduce the potential for adverse effects under all the Action Alternatives unless noted otherwise. In the course of obtaining necessary permits and other authorizations from other federal, state, and local authorities, the new owner(s) of the property may be subject to various mitigation requirements. These requirements would depend upon the specific types of land use actions, their locations on the property, and supporting activities following transfer of the property. TVA could also require additional mitigation for future actions affecting wetlands, streams, and areas within the limits of the 100-year floodplain along Pond Creek and the Tennessee River.

The following are routine and nonroutine measures to which future landowners could implement voluntarily or which would probably be required of future landowner(s) by agencies other than TVA. These include measures usually required by agencies to comply with other federal, state, or local regulations to authorize such actions and activities. These provisions would also be taken into account during the development of the Master Plan.

- Future owners would utilize appropriate BMPs during construction and operation of the property. These BMPs may include the following measures:
 - Appropriate engineering and construction BMPs would be used to avoid introduction of material into and to prevent the formation of sinkholes.
 - Construction BMPs would be used to control air emissions from open construction areas and unpaved roads. Roadways would be sprayed with water as needed to reduce fugitive dust emissions.
 - Appropriate construction BMPs would be used to reduce storm water runoff.
 - Additional BMPs like open space design, well-connected and designed streets, and storm water planning would comply with applicable local regulations, laws, or zoning ordinances.
- Prior to construction, future owners are advised to conduct an on-site survey of soil gas, and no closed structures should be constructed where data indicate that there would be intrusion and potential accumulation of VOCs.
- Future owners, in the spirit of EO 13112, could use the following voluntary measures to avoid introduction and spread of nonnative invasive plant species:
 - Limiting the introduction of weed seeds
 - Ensuring that all equipment is free of weed seeds before moving to another location
 - Using weed-free riprap or rock for projects to prevent the introduction of seeds
 - Detecting and eradicating small patches of weeds early
 - Minimizing the disturbance of desirable plants along trails, roads, and waterways
 - Maintaining desired plant communities through good management
 - Monitoring high-risk areas such as transportation corridors and bare ground
 - Revegetating disturbed sites with native or noninvasive plants

- Future owners could establish and maintain a secondary buffer around the forested wetland area.
- Future owners could remove dense stands of invasive plants to improve habitat quality for birdlife.
- The retention of existing vegetation (trees), via the measures below, in combination with limiting new roadway intersections (i.e., curb cuts) could reduce the potential for disturbance and maintain the park-like setting for viewers using TVA land and facilities along, and north of, Reservation Road.
 - Except where maintained within the existing road right-of-way, a vegetative buffer, measured 150 feet from the edge of the pavement, could be maintained along both sides of Reservation Road within the MSR study area from the intersection of Hatch Boulevard to the Wilson Dam Road overpass.
 - Except where maintained within the existing road right-of-way, a vegetative buffer, measured 150 feet from the edge of the pavement, could be maintained along Hatch Boulevard from the intersection of Reservation Road, southward for a distance of 500 feet.
 - Except where maintained within the existing road right-of-way, a vegetative buffer, measured 150 feet from the edge of the pavement, could be maintained along Wilson Dam Road from the Reservation Road overpass, southward for a distance of 2,000 feet.
 - No more than four additional curb cuts (i.e., new roadway entrances onto the area) could be made along Reservation Road.
- Analysis of potential transportation impacts determined that the LOS failures at Hatch Boulevard at Second Street could likely be mitigated with the strategic addition of turn lanes. However, the LOS failures on Hatch Boulevard would require solutions that are more comprehensive. The following are two overall potential mitigation measures:
 - **Option 1:** Realign the US 43/72 designation through Hatch Boulevard and relocate Jackson Boulevard to Birmingham Road
 - **Option 2:** Incorporate an additional access point to the MSR between the Tennessee River and Hatch Boulevard, and construct grade-separated flyover for southbound US 43/72 through traffic at Hatch Boulevard
- Measures to reduce the effects of noise could include vegetation buffers, establishing and maintaining a noise-reduction zone (i.e., calculated noise-reduction zone) between the source and receptor of nuisance sounds (i.e., industrial developments), strategically positioned or constructed physical sound barriers, enclosures for the heavy construction equipment and production machinery, proper interior acoustics, and the muffler sound suppression systems for trucks and other heavy equipment.

TVA would comply with the following applicable laws, regulations, EOs, and obligations associated with existing agreements.

- TVA would warrant in the sale deed that the property has been cleaned up to the extent believed necessary to protect human health and the environment and that the

U.S. will perform any cleanup that becomes necessary in the future as a result of contamination that occurred prior to the sale.

- Approximately 17 acres of land has been remediated (i.e., cleaned up) to industrial screening level. No land within the area covered by the existing RCRA Permit, 2,260 acres, would be sold or transferred from federal ownership unless the land is conveyed at the unrestricted use level or with the appropriate environmental covenants and restrictions in the deed, transfer, or other conveyance document. Additional land use restrictions may be applicable as required by Alabama's Uniform Environmental Covenants Act.
- Consistent with TVA implementation procedures for EO 11990, all future owners shall avoid construction within wetland areas without TVA approval. As appropriate, all future owners of federal wetlands conveyed by TVA shall conduct a wetland delineation of any site proposal for development. Unless there is no practicable alternative, development may not occur in identified wetland areas.
- Consistent with TVA implementation procedures for EO 11988, all future owners shall avoid construction of obstructions within the limits of the 100-year floodplain without appropriate local government authorization and approval under Section 26a of the TVA Act. Unless there is no practicable alternative, development may not occur in floodplain areas.
- TVA will comply with the terms and conditions of a September 18, 2001, agreement with the ALDOT and FHWA regarding use of Transportation Enhancement Project funds for construction of the 1-mile segment of the National Recreation Trail Complex trail located on the south side of Reservation Road.
- TVA would honor the terms and conditions of its agricultural licenses on land tracts on the MSR study area until the date of cancellation prior to any land transfer.
- Additional land use restrictions may be applicable as required by Alabama's Uniform Environmental Covenants Act and would be enforced by ADEM.

TVA would be responsible for requiring, monitoring, and enforcing the following mitigation measures. To the extent practicable, this could be accomplished by placing conditions in the land transfer agreement and coordinating with ADEM's Environmental Covenants Act, where applicable. Section 106 of the NHPA requires that TVA consult with the Alabama Historical Commission SHPO before funding, authorizing, or carrying out any undertaking that is included in or eligible for inclusion in the NRHP. In addition, see elements common to all the Action Alternatives in Section 2.1.

- The only permissible use of the phosphate slag storage area is for a utility corridor to the Tennessee River to support any needed infrastructure development on the MSR study area. TVA would not transfer this land for future development but would make it available under specific use agreements, such as easements. Because of environmental and reservoir operations constraints along the left-descending (south bank) shoreline of the Tennessee River in the vicinity of the utility corridor, TVA would not approve a barge terminal, commercial dock, or other similar shoreline facility.
- Total annual exposure to any person within the phosphate slag storage area is to remain restricted to no more than 500 hours per year.

- If conditions at the phosphate slag storage area are altered and it becomes necessary to reevaluate radiation exposure, TVA will verify in consultation with the Alabama Department of Public Health (ADPH) any change to the phosphate slag storage area that would allow increased exposure times. This would include any effort to mitigate radioactive levels at the site through the use of soil cover or caps of various materials.
- If it becomes necessary through the proposed use of the phosphate slag storage area for subsurface infrastructure enhancements (e.g., buried pipeline), TVA would conduct further radiological measurement and monitoring to determine a worker's potential exposure to ensure safety.
- No subsurface disturbance or other excavation of buried materials would be allowed within the low-level radioactive waste burial site (LLRWBS).
- TVA would not allow removal of groundwater for drinking water (i.e., potable use purposes) from anywhere on the MSR study area.
- TVA would adhere to the stipulations in the final executed MOA between TVA and the Alabama SHPO (Appendix A) to mitigate for the loss of NRHP-eligible properties. Such mitigation includes imposition of architectural controls and design guidelines on new owners and consideration of these properties in the Master Plan. TVA would adhere to required measures through inclusion of requirements in the transfer deed.
- Site 1CT495, the remnants of Wilson Power Plant foundations, shall be avoided during any construction in the utility corridor to the Tennessee River.
- In the event of construction within the utility corridor, TVA would take into account the location of the Rockpile Hiking Trail and the paved trail complex on the north side of Reservation Road and, to the extent practicable, avoid trail closure or reduce effects of trail usage through planning or other design features. This section of the Rockpile trail crosses the skimmer wall built as part of the Wilson Power Plant. Because there is an inlet behind (landward) the wall, some forms of water access accommodations could be accommodated without impacting the trail or the fishing activity that occurs in this area. Conversely, water access needs that would require breach or removal of the skimmer wall would sever the existing trail and also adversely impact shoreline fishing.
- An approximate 900-foot section of paved National Recreation Trail Complex, including a protective corridor, on the Multipurpose Building parcel would be (a) retained by TVA, (b) preserved and managed for public recreation use under an agreement (e.g., easement) between TVA and a new landowner, or (c) relocated to skirt the boundaries of the Multipurpose Building parcel.
- Prior to any TVA land or buildings being transferred from federal ownership under any of the Action Alternatives, TVA would assure that any required environmental due diligence assessments on existing buildings interiors (i.e., construction materials) are completed.

2.4 Preferred Alternative

The Environmentally Preferred Alternative is Alternative B because there would be a deliberate effort to conserve sensitive resources, i.e., wetlands and floodplains, and to encourage the establishment of environmentally friendly developments. However, TVA has

determined that selection of any of the action alternatives would present an acceptable range of environmental impacts and risks. Accordingly, TVA has selected Alternative F as its Preferred Alternative based on anticipated benefits to the community and business considerations consistent with the TVA Act, the TVA Land Policy, and other applicable requirements. The adoption of Alternative F would provide the greatest opportunity for economic benefits to the area and region, would reduce TVA's O&M costs and environmental footprint, and would encourage reuse of some historic buildings and structures in the MSR study area. Implementation of Alternative F, consistent with the Master Plan, would also leave future land use decisions to the local community.