

Appendix H

U.S. Forest Service Management Units

H.1 USFS Management Units crossed by TWE Project Alternatives

The analysis area includes NFS lands under the jurisdiction of five different national forests. NFS lands within the analysis area contain special managed units, which are held to special management prescriptions developed to protect resources or specific opportunities. The NFS lands special managed units are depicted in the following **Figures H-1 through H-5**. Each forest plan (LRMP) provides direction, goals, standards, and guidelines for unit management of these areas. More detail can be found in the Forest Plan compliance spreadsheets contained in the Project Record. Additionally, the USFS has published National BMPs for water quality management, and BMPs applicable to the Project have been listed below.

H.1.1 Ashley National Forest

Reference: Land and Resource Management Plan (LRMP) for the Ashley National Forest, 1986, and LWMP Amendment CC-1.

In general, all alternatives are compliance with the 1986 Ashley National Forest LRMP. The following four management areas could be crossed by the Project, which are depicted on **Figure H-1, Maps 1 and 2**.

- **Management Area D (Livestock Grazing):** Managed for livestock grazing. Open to all recreation uses and generally all travel. Other construction is permitted if conflicts with livestock grazing are mitigated. Riparian areas maintained to protect streambank stability.
- **Management Area E (Wildlife Habitat Emphasis):** Includes portions of summer and winter ranges, T&E habitat, strutting areas, calving and fawning areas and spawning areas. Recreation may be closed or restricted during key use periods. Road closures are common to in stress seasons for featured species. Livestock grazing may be limited or excluded and mineral development may have seasonal or NSO restrictions. New construction would be mitigated for wildlife needs. Riparian areas are protected.
- **Management Area F (Dispersed Recreation Roaded):** Area receiving a variety of uses in a variety of landforms and vegetation types in a roaded environment. Dispersed recreation is favored over other resources. Improvements designed to enhance recreation opportunities and optimize species diversity. Construction allowed as needed. Maintenance at high levels on main roads. May have road closures to protect resources.
- **Management Area N (Existing Low Management Emphasis):** Resource protection as needed. Access may be controlled to enhance wildlife habitat. Improvements allowed on low investment basis. Habitat diversity. No restrictions to mineral development other than standard s and guidelines.

H.1.2 Uinta National Forest

References: Land and Resource Management Plan for the Uinta National Forest, May 2003; Correction No. 4, 2003 Uinta National Forest Land and Resource Management Plan, November 27, 2006).

In general, all alternatives are compliance with the 2003 Uinta National Forest LRMP. The following seven management prescriptions could be crossed by the Project, which are depicted on **Figure H-2, Maps 1 and 2**.

- **3.1 Aquatic, Terrestrial, and Hydrologic Resources:** Emphasis is on maintaining or improving existing quality aquatic, terrestrial, and hydrologic conditions through limited to moderate management activity. This prescription includes areas where multiple habitat and resource values are present. These values are recognized as important and may require restoration to reach desired conditions. Other uses and activities may be allowed provided they

do not inhibit attainment of objectives for the areas. Vegetation management activities, including timber harvest, may be used to address vegetation needs for wildlife habitat, watershed improvement, and/or forest health needs. Additional motorized trails may be constructed. Livestock grazing is allowed where compatible with desired aquatic, terrestrial, and hydrologic conditions. Leasing stipulations are CSU for all areas except, semi-primitive non-motorized, which is NSO.

- **3.3 Aquatic and Terrestrial Habitat:** These areas are managed for quality habitat to contribute toward maintenance and/or recovery of plant and animal species. Resources are maintained or improved to achieve desired conditions for habitats of threatened, endangered, sensitive, and Management Indicator Species (MIS). Most, but not all, of the critical deer and elk winter range is included within this prescription. This prescription applies to areas with multiple habitats (big game winter range, Lynx Analysis Units [LAUs], greater sage grouse habitat in the Vernon and Strawberry Reservoir Management Areas, etc.). Where habitats overlap, the most restrictive standard or guideline will take precedence. No additional winter recreation facilities may be constructed in the areas of this prescription managed as Lynx Analysis Units (LAUs). Leasing stipulations are TL/CSU for all areas except, semi-primitive non-motorized, which is NSO.
- **4.4 Dispersed Recreation:** The emphasis in this prescription is on providing opportunities for and/or facilitating dispersed recreation. This management prescription includes areas of existing or anticipated concentrations of recreational use. Intensive vegetation management may be required to maintain desired conditions. Additional motorized trails may be constructed. Development is limited to a level that facilitates the dispersed recreation experience and addresses resource impacts. Leasing stipulations are TL/CSU for all areas except, semi-primitive non-motorized, which is NSO.
- **4.4 Developed Recreation:** These areas include developed facilities such as campgrounds, boat docks, resorts, and water systems. Because of the large capital investments in these areas, site protection will be paramount. Wildland fire use is not allowed. Intensive vegetation management may be required to maintain desired conditions. Additional motorized trails may be constructed.
- **5.1 Forested Ecosystems – Limited Development:** Emphasis is on maintaining or restoring vegetation to achieve multiple resource values. Additional motorized trails may be constructed. Management of forested ecosystems enhances wildlife habitats, improves watershed stability, and improves vegetative diversity. Management encompasses the full range of land and resource treatment activities. Additional motorized trails may be constructed. Grazing by livestock is allowed, but forage production for livestock use is limited to meet requirements for wildlife, riparian, water quality, or other objectives. Leasing stipulations are CSU for all areas except, semi-primitive non-motorized, which is NSO.
- **5.2 Forested Areas -Vegetation Management:** Emphasis is on maintaining or restoring vegetation to achieve multiple resource values and provide for multiple uses. Management area direction also includes timber resource goals and objectives, but achievement of high yields is not the primary purpose. The Forest's suitable timber base is located within this management prescription. Timber volumes harvested are applied to the Forest's allowable sale quantity (ASQ). Management encompasses the full range of activities and uses. Road densities and designs are compatible with multiple resource values. Additional motorized trails may be constructed. Recreation and other developments requiring the construction and reconstruction of roads and trails will be considered.
- **6.1 Non-forested Ecosystems:** Emphasis is on maintaining or restoring vegetation conditions to achieve ecosystem health. Additional motorized trails may be constructed. Standard lease terms for all ROS except for semi-primitive non-motorized (NSO) and semi-primitive motorized (CSU).

- **8.2 Utility Corridor/Communication Sites:** Features in these areas may include various non-recreation special uses such as utility corridors or communication sites allocated for long-term site investment. Vegetation management should be limited to activities consistent with installation and maintenance of the utility line or communication site and mitigation against potential erosion and visual quality impacts. Recreation use is limited to incidental dispersed use, such as a trail crossing through the area. Public access restrictions may be imposed within energy transmission, utility, and communication corridors and sites for health, safety, or resource considerations, or to be compatible with management direction for surrounding areas. CSU for all leasing. See other management areas for surrounding area stipulations.

The Uinta NF is also broken down into geographical management areas that identify desired future condition through these management prescriptions. The management areas units that are within the analysis area are: Upper Spanish Fork Canyon, Diamond Fork, Strawberry Reservoir, Willow Creek, White River, Thistle, Nephi, and Mona.

H.1.3 Manti-La Sal National Forest

Reference: Land and Resource Management Plan (LRMP) for the Manti-La Sal National Forest, 1986.

In general, all alternatives are compliance with the 1986 Manti-La Sal National Forest LRMP. The following seven management units could be crossed by the Project, which are depicted on **Figure H-3, Maps 1** through **3**.

- **General Big-Game Winter Range (GWR):** Management emphasis is on providing general big-game winter range. These are areas wildlife traditionally use. Treatments of various types are applied to increase forage production and plant species composition. Investments in compatible resource activities may occur. Permanent roads and special uses may be permitted. Short-term or temporary roads are obliterated and rehabilitated within one year after intended use. Motorized use is managed as appropriate to prevent unacceptable stress on big-game animals during the primary use season. Specific cover opening ratios, opening width, and stand design are maintained in pinyon-juniper woodland chaining areas.
- **Key Big-Game Winter Range (KWR):** Management emphasis is on providing winter forage and cover for big-game species in areas that must be available and unencumbered for wildlife use each year during the critical winter period. Vegetative treatments are applied to increase forage production of grass, forb, and especially browse species and/or to create and maintain thermal and hiding cover. Conflicting uses are not permitted on a continuing basis, but may be permitted outside the critical season if there is no long-term degradation. New roads other than short-term (temporary) roads are located outside of the management unit. Short-term roads will be rehabilitated to provide for wildlife use within one season after completed use. Prohibit motorized use to prevent unacceptable stress on big game during critical use periods.
- **Developed Recreation Sites (DRS):** Management emphasis is for developed recreation facilities such as campgrounds, picnic grounds, trailheads, visitor information facilities, summer homes areas, ski areas, and water-related support facilities. Proposed sites) are managed to maintain the site attractiveness until developed. Facilities such as roads, trails, signs, etc., may dominate or subordinate, but should harmonize and blend with the characteristic landscape. As appropriate, existing developed sites should be withdrawn from locatable mineral entry, and closed to surface occupancy for leasable and saleable minerals. The prescription can be considered for application to all existing developed recreation sites and proposed sites identified for development.
- **Minerals Management Area (MMA):** Management emphasis is on making land surface available for existing and potential major mineral developments. This prescription is applied where the land surface is or will be used for facilities needed for the extraction of leasable minerals over an extended period. The areas associated with known, potential, development

sites are included in this unit. Additional areas may be added to this unit as mines or fields are located and developed. As the developments are removed and restoration is completed, these areas may be changed to other appropriate management units. In units where mineral development is pending, renewable resource activities strive to be compatible with the management goals of adjacent management units. Long-term investments, such as timber planting, generally are not made. However, short-term investments, such as range and wildlife revegetation projects, may be made on these units.

- **Range Forage Production (RNG):** Emphasis is on production of forage and cover for domestic livestock and wildlife. Intensive grazing management systems are generally favored. Some periodic heavy forage utilization may occur. Opportunities for investments in structural and non-structural improvements to increase forage production is moderate to high. Investments are made in compatible resource activities. Dispersed recreation opportunities vary between semi-primitive non-motorized and roaded natural appearing. Management activities are evident, but harmonize with the natural setting
- **Utility Corridor (UC):** Emphasis is on providing transportation corridors for major cross-country pipelines, electrical transmission lines, and telephone lines. Management activities within these linear corridors strive to be compatible with the management goals of the adjacent management units.
- **Wood Fiber Production and Utilization (TBR):** Emphasis is on management for the production and use of wood-fiber for a variety of wood products. The harvest methods by Forest cover type are single tree and group selection and shelterwood in Englemann spruce-subalpine fire, Douglas-fire, ponderosa pine, mixed conifers, and clear cutting in aspen. Harvesting will be accomplished with methods including cable, conventional crawler tractor, or rubber-tired skidders. Pre-commercial thinning and intermediate harvest will be used to increase or maintain fiber production. Dispersed recreation opportunities vary between semi-primitive non-motorized and roaded natural appearing. Wildlife habitat diversity may be enhanced by vegetative manipulation. Livestock grazing may be permitted. This prescription could alter water yield through vegetation management, as well as decreased evapotranspiration and maximize snow retention in small openings on low energy slopes.
- **Research, Protection, and Interpretation of Lands and Resource (RPI):** Management emphasis for these units is to manage unique ecological, geological, paleontological, archeological, or historical sites or features of the Forest for research, protection, and/or interpretation of land and resources condition while making them available for study and viewing. Other resource use may be made of these units as long as they do not conflict with the purpose for which they exist. Activities that might cause impairment or occupancy of the unit for any reason other than interpretive are usually prohibited.
- **Special Land Designation (SLD):** Management emphasis is on making lands available for existing and potential specialized uses. Sites that may be considered for application of this prescription include Ranger or Guard Stations and other administrative sites, electronic sites, and similar special land uses. Generally, other resource development and use activities within these units strive to be compatible with the management goals of the adjacent management units. However, this is often limited by the special activity or use authorized on the unit.
- **Undeveloped Motorized Recreation Sites (UDM):** Management emphasis is on providing high quality dispersed recreation opportunities in areas characteristically receiving moderate to heavy levels of use. Visual resources are managed so that activities of man remain visually subordinate or are not evident. Range, timber, wildlife, and mineral resource activities and use may occur subject to maintaining appropriate ROS user experience or setting characteristics visual quality objectives, not permanently exceeding threshold levels for noise and air quality, or seriously impairing recreation use. These units generally occur along arterial and collector roads, although they may occur along local roads or trails and generally near water bodies.

- **Watershed Protection/Improvement (WPE):** Management emphasis is for watershed protection and improvement in areas where watershed treatment (i.e., contour trenching and furrowing) have been, or should be, applied, and where other use restrictions are implemented to protect on-site and downstream values from flooding and sedimentation. Also included, but not mapped, are some areas that have received damage by landslide and flood events. Units receiving damage by such events should be entered on the Watershed Improvement Needs Inventory list and evaluated against all other potential projects for priority of treatment.

H.1.4 Fishlake National Forest

Reference: Land and Resource Management Plan for the Fishlake National Forest, 1986.

In general, all alternatives are compliance with the 1986 Fishlake National Forest LRMP, with the exceptions of Visual Resource Standard, which is addressed in Chapter 4 (Land Use Plan Amendments). The following five management areas could be crossed by the Project, which are depicted on **Figure H-4, Maps 1** through **4**.

- **2B Rural and Roaded-Natural Recreation Opportunities:** Management emphasis is for rural and roaded-natural recreation opportunities. Motorized and no motorized recreation activities such as driving for pleasure, viewing scenery, picnicking, fishing, snowmobiling, and cross-country skiing are possible. Conventional use of highway-type vehicles is provided for in design and construction of facilities. Motorized travel may be prohibited or restricted to designated routes to protect physical and biological resources. Visual resources are managed so that management activities maintain or improve the quality of recreation opportunities. Management activities are not evident, remain visually subordinate, or may be dominant, but harmonize and blend with the natural setting. Landscape rehabilitation is used to restore landscapes to a desirable visual quality. Enhancement aimed at increasing positive elements of the landscape to improve visual variety is also used. Minimum visual quality objective (VQO) shall be partial retention. Arterial and collector roads and trails are Sensitivity level 1. Permit special uses which are complementary and compatible with the kind and development level of forest service facilities within the area may be permitted.
- **3A Non-Motorized Recreation with Development of other Resources:** Management emphasis is for non-motorized recreation outside of wilderness. Recreation opportunities such as hiking, horseback riding, hunting and cross-country skiing are available. Seasonal or permanent restrictions on human use may be applied to provide seclusion for wildlife such as nesting for raptorial birds, big game rearing areas, and mammals (mountain lion, elk) with large home ranges. Visual resources are managed so that management activities are not visually evident or remain visually subordinate. Investments in compatible resource uses such as livestock grazing and mineral exploration and development occur; but roads are closed to public use. Commercial and noncommercial tree harvest occur.
- **4A Fish Habitat Improvement:** Emphasis is on fish habitat improvement where aquatic habitat is below productive potential. Habitat enhancement techniques may be used on lake, reservoir, river or stream habitats and their adjacent riparian ecosystems. The goals of management are to maintain or improve aquatic habitat condition for fish at or above a good habitat condition rating, maintain stable stream channels, meet water quality standards for cold water fisheries, provide healthy, self-perpetuating riparian plant communities and provide habitats for viable populations of wildlife. Vehicular travel is limited on roads and trails at times when excessive stream sedimentation would result. New road construction is restricted within riparian areas unless no feasible alternative exists. Forest riparian ecosystems are treated to improve wildlife and fish habitat diversity through specified silvicultural objectives.
- **4B Management Indicator Species:** Management emphasis is on the habitat needs of one or more management indicator species. Species with compatible habitat needs are selected for an area. The prescription can be applied to emphasize groups of species, such as early succession

dependent or late succession dependent, in order to increase species richness or diversity. Vegetation characteristics and human activities are managed to provide optimum habitat for the selected species, or to meet population goals jointly agreed to with the Utah Division of Wildlife Resources. Recreation and other human activities are regulated to favor the needs of the designated species. Roaded natural recreation opportunities are provided along forest arterial and collector roads. Local roads and trails are either open or closed to public motorized travel. Semi primitive motorized recreation opportunities are provided on those local roads and trails that remain open. Semi-primitive non-motorized opportunities are provided on those that are closed. Investments in other compatible resource uses may occur but will be secondary to habitat requirements. Management activities may dominate in foreground and middleground, but harmonize and blend with the natural setting.

- **5A Big Game Winter Range:** Management emphasis is on winter range for deer, elk, and bighorn sheep if introduced. Treatments are applied to increase forage production of existing grass, forb, and browse species or to alter plant species composition. Investments in compatible resource activities occur. Management activities are not evident, remain visually subordinate, or are dominant in the foreground or middleground but harmonize or blend with the natural setting. Eliminate special uses that conflict with management wintering animals. New roads other than short-term (temporary) roads are located outside of the management area. Short term roads are obliterated within one season after intended use. Selected local roads are closed and motorized recreation use is managed to prevent unacceptable stress on big game animals during the primary big game use season. Minimum VQO shall be modification. Roads cross winter range in the minimum distance feasible. When road construction is allowed, lost wildlife, habitat will be mitigated.
- **6B Livestock Grazing:** Intensive management of range resources through structural and non-structural improvement with associated maintenance Investments are made in compatible resource activities. Dispersed recreational opportunities vary between semi-primitive non motorized and roaded natural. Management activities are evident but harmonize and blend with the natural setting. Minimum VQO shall be modification.
- **9F Improved Watershed Condition:** Management emphasis is on improving watershed condition and thus eliminating the watershed improvement needs backlog. Emphasis is also on maintenance of projects already completed. Management activities in the foreground, middleground, and background may dominate, but should be designed to harmonize and blend with the natural setting to the extent possible. Motorized travel is prohibited except for over-snow machines and for designated routes. Routes may have seasonal closures.

H.1.5 Dixie National Forest

Reference: Land and Resource Management Plan for the Dixie National Forest, 1986; Goshawk Plan Amendment

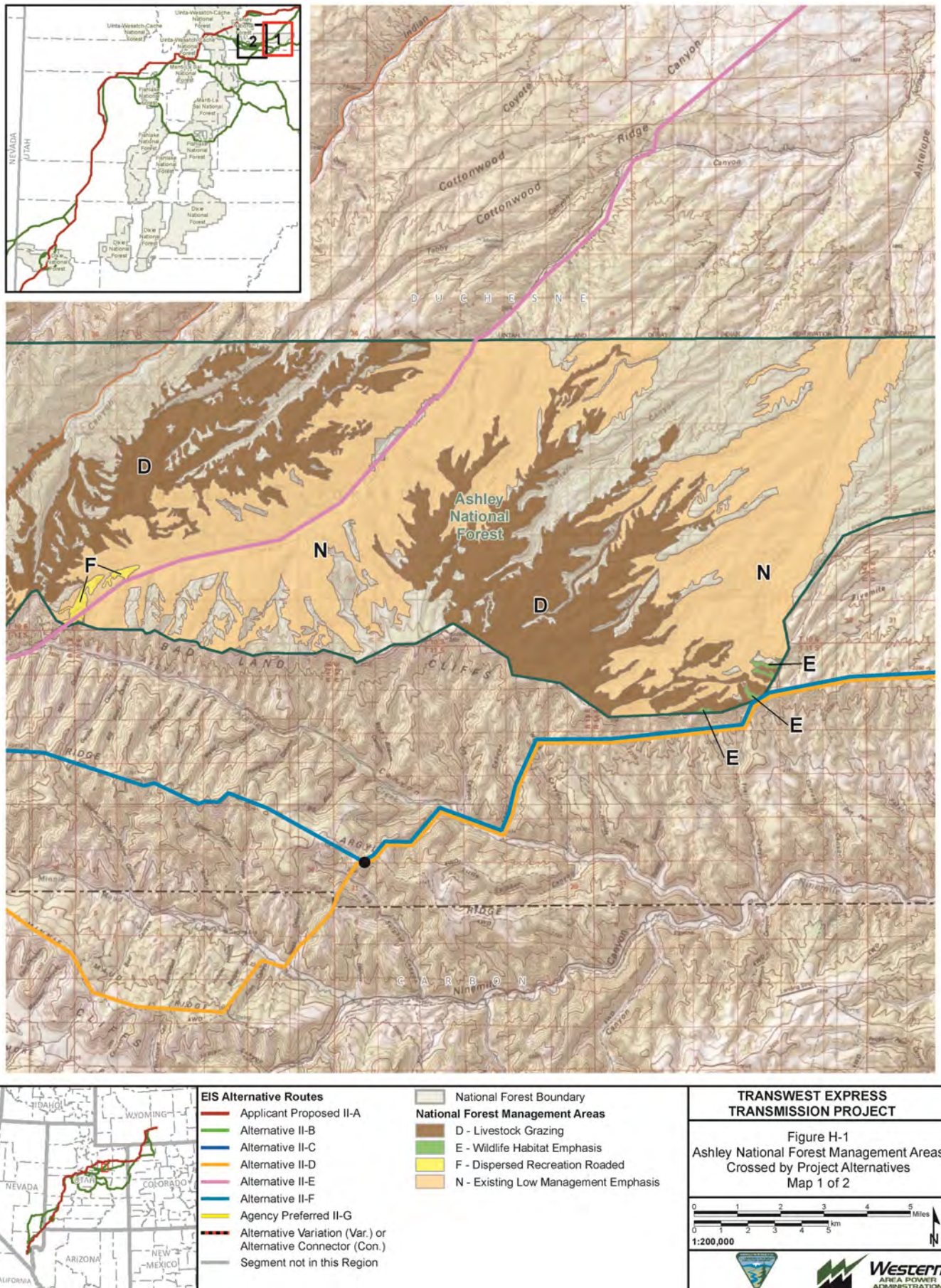
In general, all alternatives are compliance with the 1986 Dixie National Forest LRMP. The following seven management areas could be crossed by the Project, which are depicted on **Figure H-5**.

- **1-General Forest Direction:** Forest-wide general management standards and guidelines apply in this area.
- **2b Roaded Natural Recreation:** Management emphasis is for rural and roaded-natural recreation opportunities. Motorized and non-motorized recreation activities such as driving for pleasure, viewing scenery, picnicking, fishing, snowmobiling, and cross-country skiing are possible. Conventional use of highway-type vehicles is provided for in design and construction of facilities. Motorized travel may be prohibited or restricted to designated routes, to protect physical and biological resources. Visual resources are managed so that management activities maintain or improve the quality of recreation opportunities. Management activities are not evident, remain visually subordinate, or may be dominant, but harmonize and blend with the

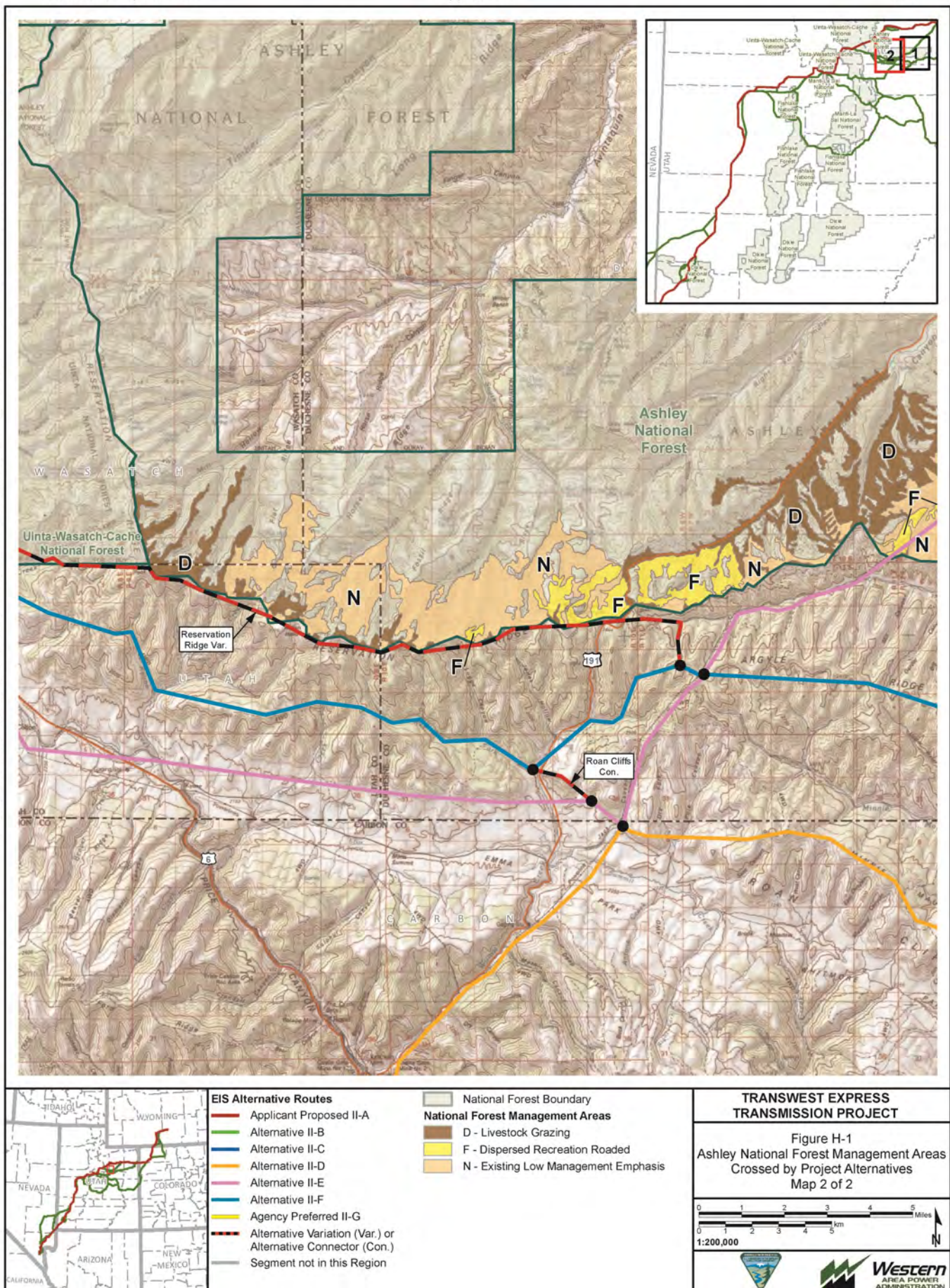
natural setting. Landscape rehabilitation is used to restore landscapes to a desirable visual quality. Enhancement aimed at increasing positive elements of the landscape to improve visual variety is also used.

- **4c Wildlife Habitat - Brushy Range:** Management emphasis is on wildlife habitat in hardwood and shrub-dominated draws and other areas of woody vegetation to sustain their inherent biological, physical, and visual values. Recreational opportunities vary between semi-primitive non-motorized and roaded natural. Management activities may dominate in foreground or middle ground but harmonize and blend in the natural setting. Do not go below VQO of modification. Recreation should not conflict with habitat needs of MIS. Semi-primitive non-motorized, semi-primitive motorized.
- **5a Big-Game Winter Range:** Management emphasis is on winter range for deer, elk, and pronghorn. Treatments are applied to increase forage production of existing grass, forb, and browse species or to alter plant species composition. Investments in compatible resource activities occur. Management activities are not evident, remain visually subordinate, or are dominant in the foreground or middleground but harmonize or blend with the natural setting. New roads other than short-term (temporary) roads are located outside of the management area. Short-term roads are obliterated within one season after intended use. Existing roads are closed and new motorized recreation use is managed to protect unacceptable stress on big game during the primary big game season. Design and implement management activities to blend with the natural landscape Do not go below VQO of modification.
- **6a Livestock Grazing:** The area is managed for livestock grazing through structural and non-structural improvement with associated maintenance Investments are made in compatible resource activities. Dispersed recreational opportunities vary between semi-primitive nonmotorized and roaded natural. Management activities are evident but harmonize and blend with the natural setting. Minimum VQO shall be modification. Design and implement management activities to blend with the natural landscape. Do not go below VQO of modification. When project require clearing of vegetation and/or soils disturbances, use irregular clearing edges and shaped to blend with the natural landscape. Prohibit motorized vehicle use off Forest System roads and trails (except snowmobiles operating on snow) in subalpine and other ecosystems where needed to protect soils, vegetation, or special wildlife habitat.
- **9a Riparian Management:** The goals of management are to provide healthy, self-perpetuating plant communities, meet water quality standards, provide habitats for viable populations of wildlife and fish, and provide stable stream channels and still water body shorelines. The aquatic ecosystem may contain fisheries habitat improvement and channel stabilizing facilities that harmonize with the visual setting and maintain or improve wildlife or fish habitat. Management area is located adjacent to perennial streams and across the forest. Includes aquatic ecosystems. Riparian ecosystem and adjacent eco systems that are within 100 from edges of perennial streams and other waterbodies. Developed recreation restricted/modified within 100-year floodplain. Minimum VQO shall be partial retention.
- **10B Municipal Water Supply Watersheds:** Management emphasis is to protect or improve the quality and quantity of municipal water supplies. Management practices are modified. Allow motorized travel only on established roads and trails. Close watershed to all travel when the road or trail surfaces could be damaged to the degree that water quality would be degraded. Generally roads are not permitted. VQO of retention. Immediately rehabilitate man-caused disturbances and restore burned areas. Inspect rehabilitated areas annually and provide maintenance necessary to protect the watershed. Within riparian areas apply management direction in riparian area management prescription except as amended by the direction in this prescription. Use Chapter 6 of State of Utah Public Drinking Water regulations as a guide. Provide for special protection zone within 1,500 feet up gradient and 100 feet down gradient of spring sources of Municipal water supplies.

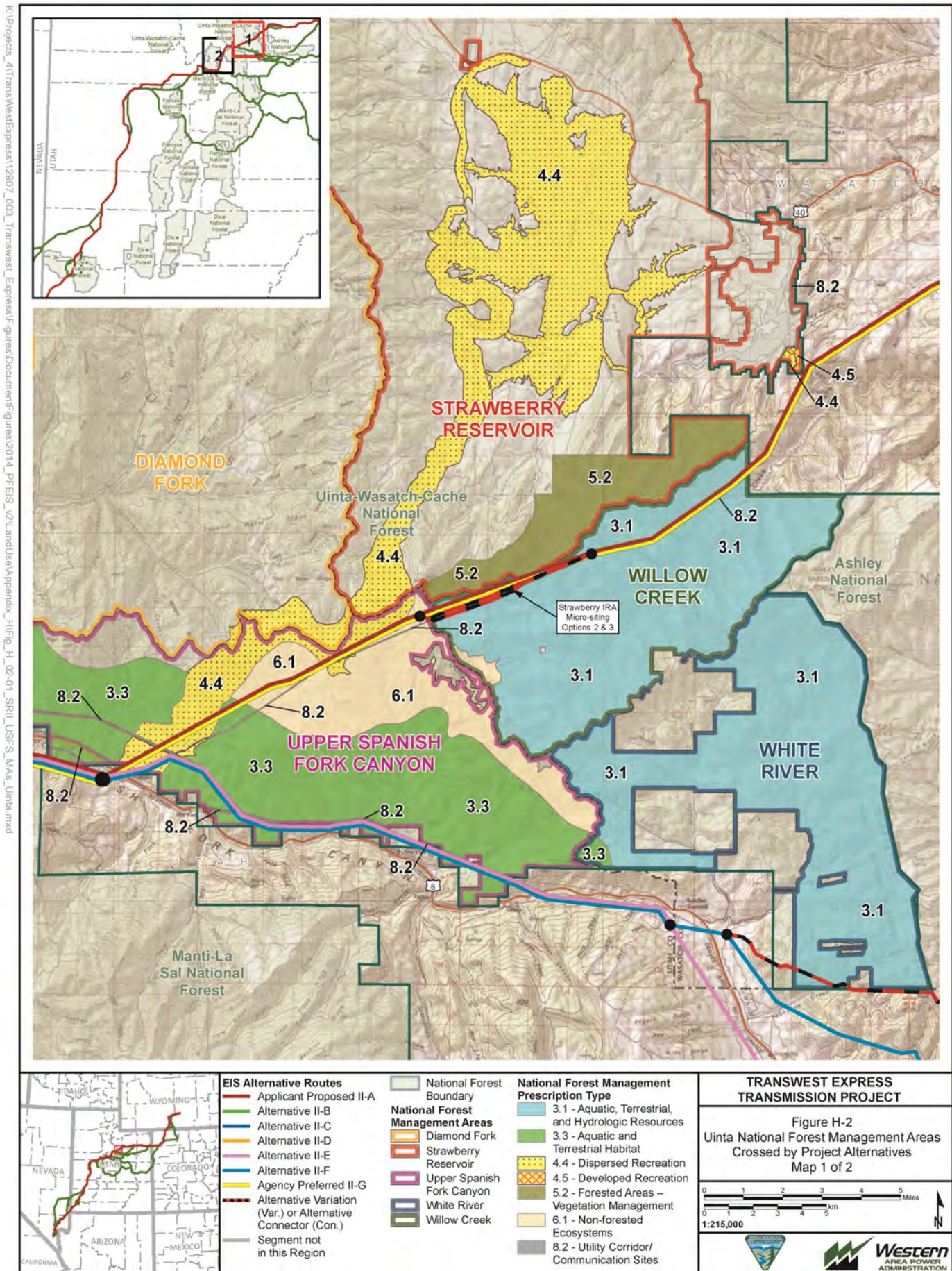
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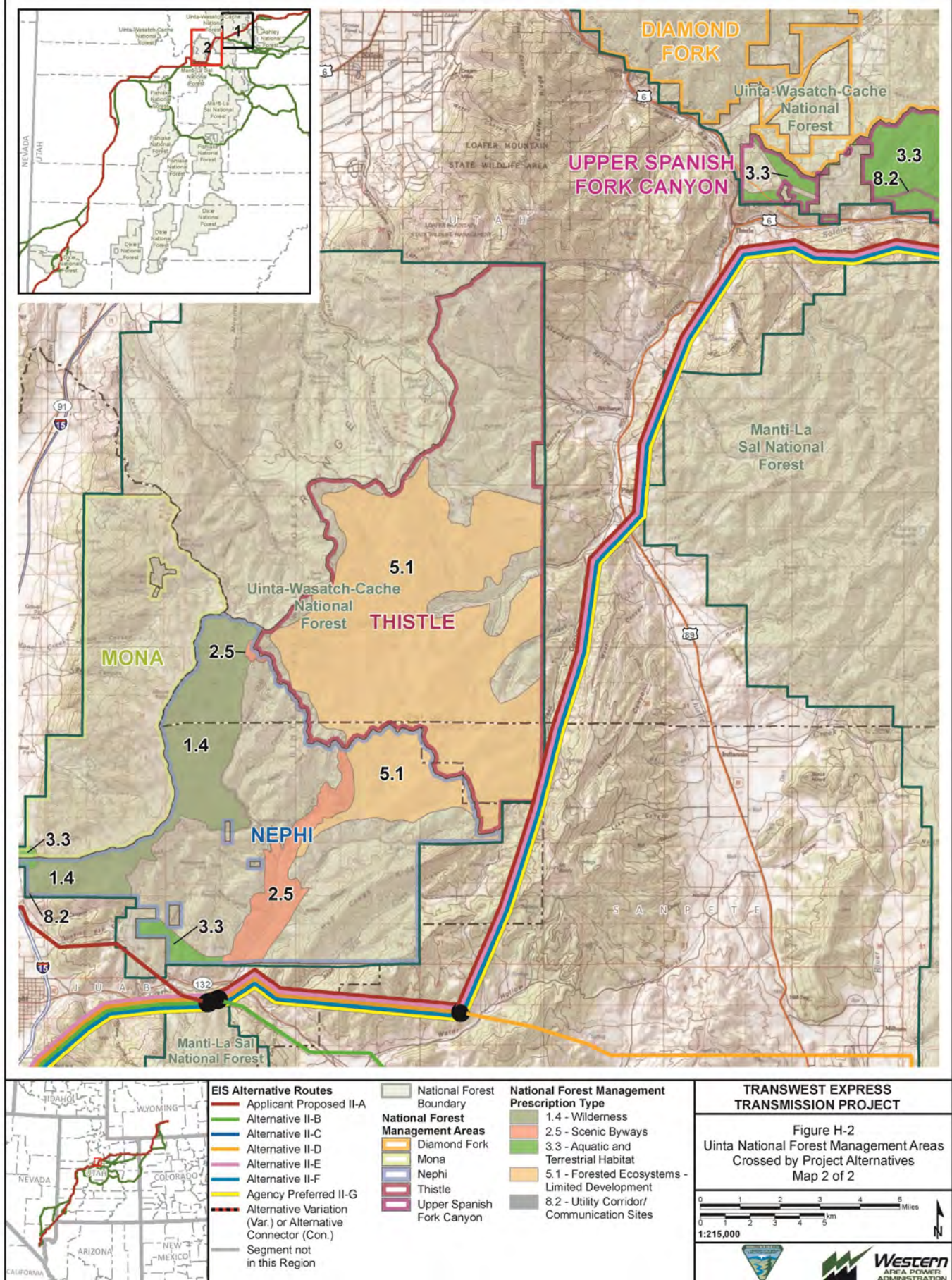
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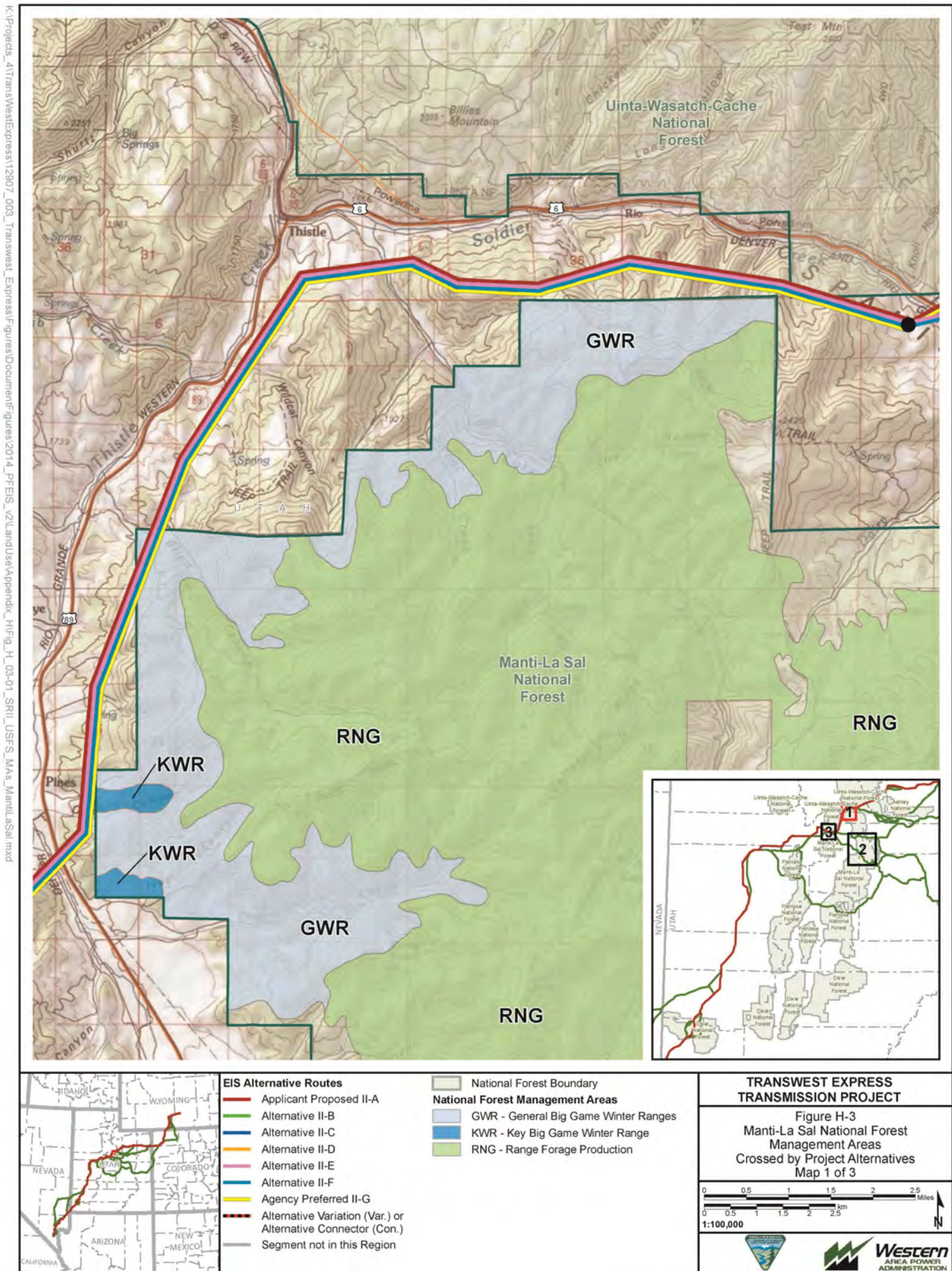
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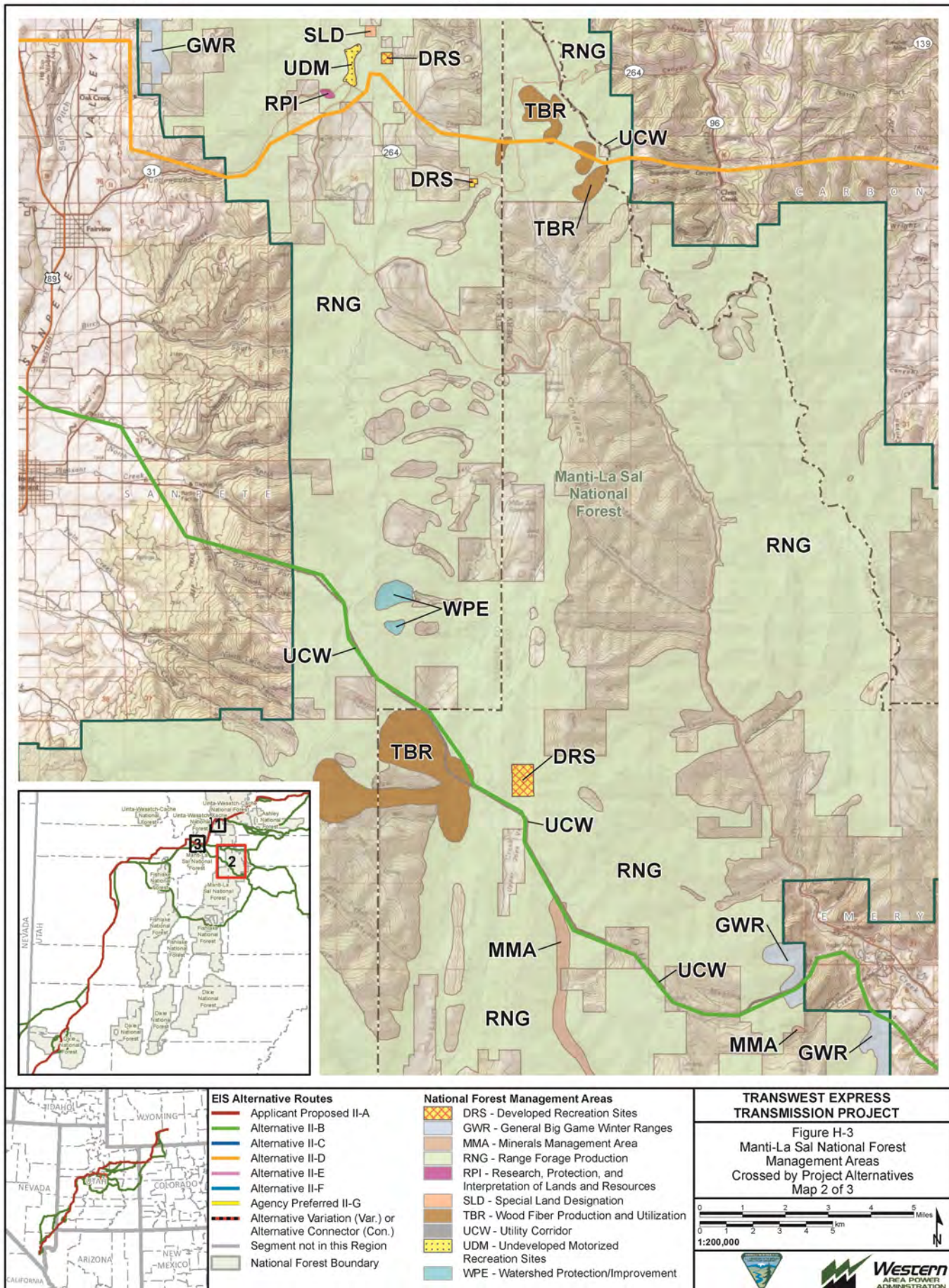


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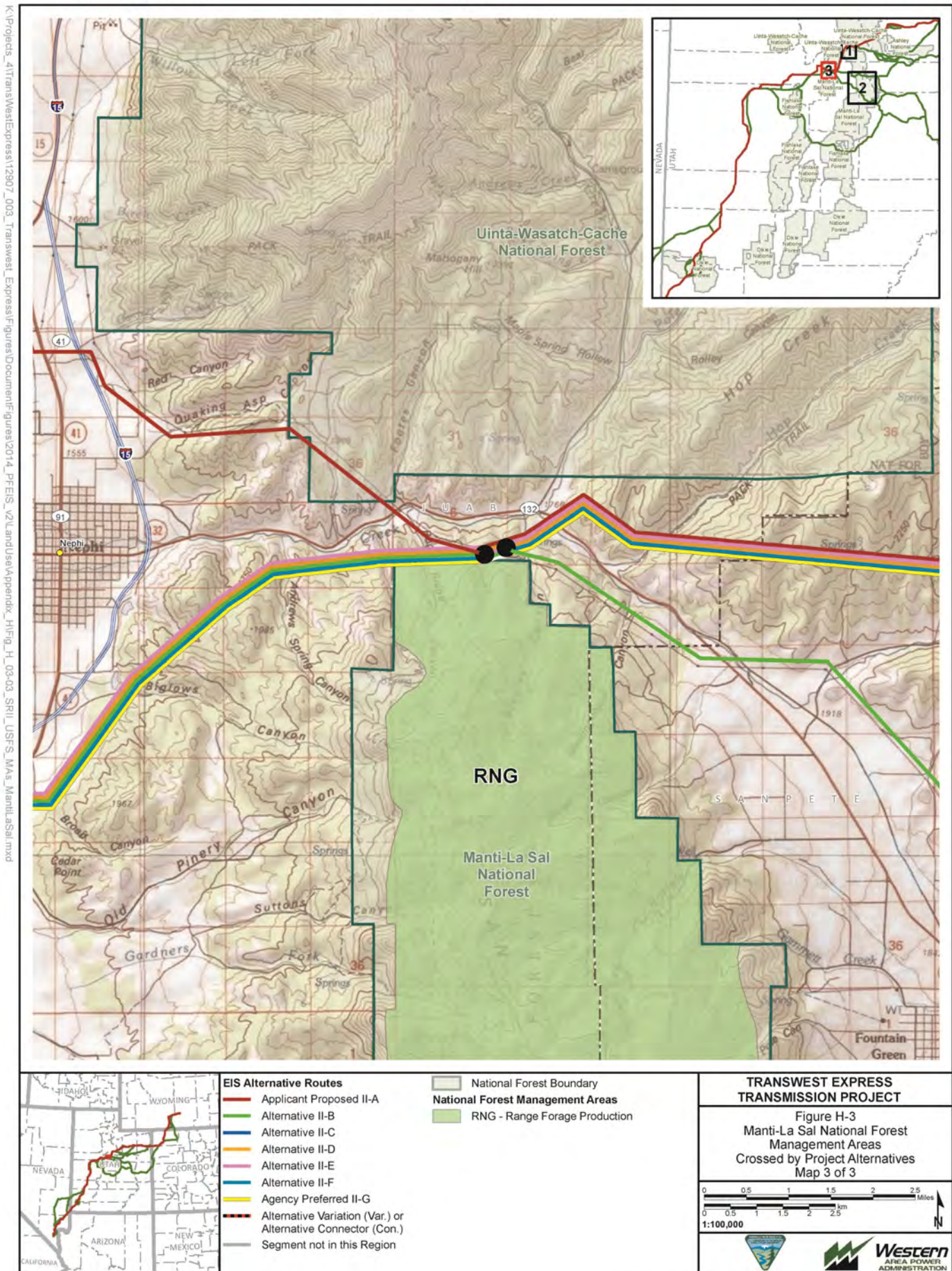


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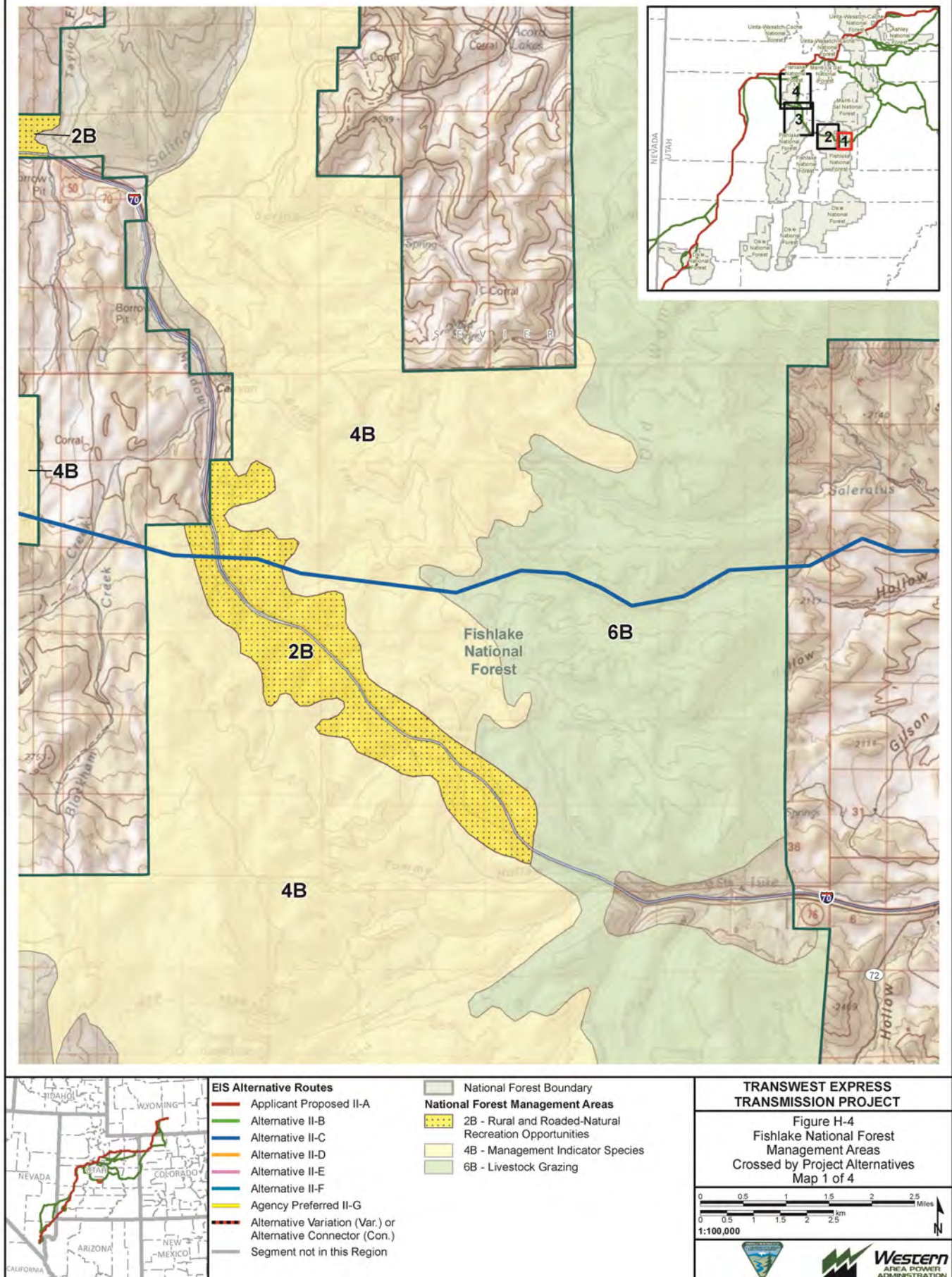


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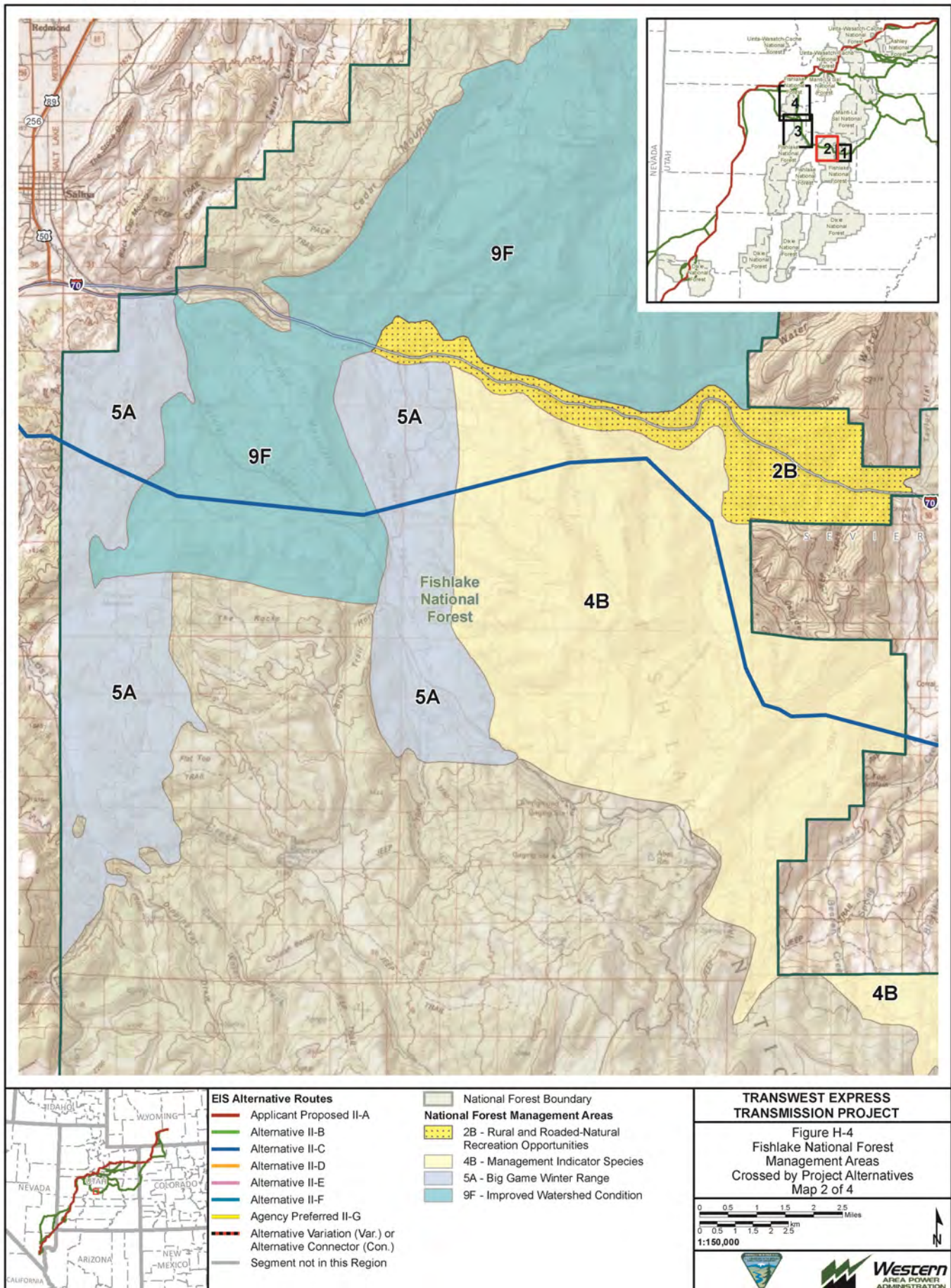
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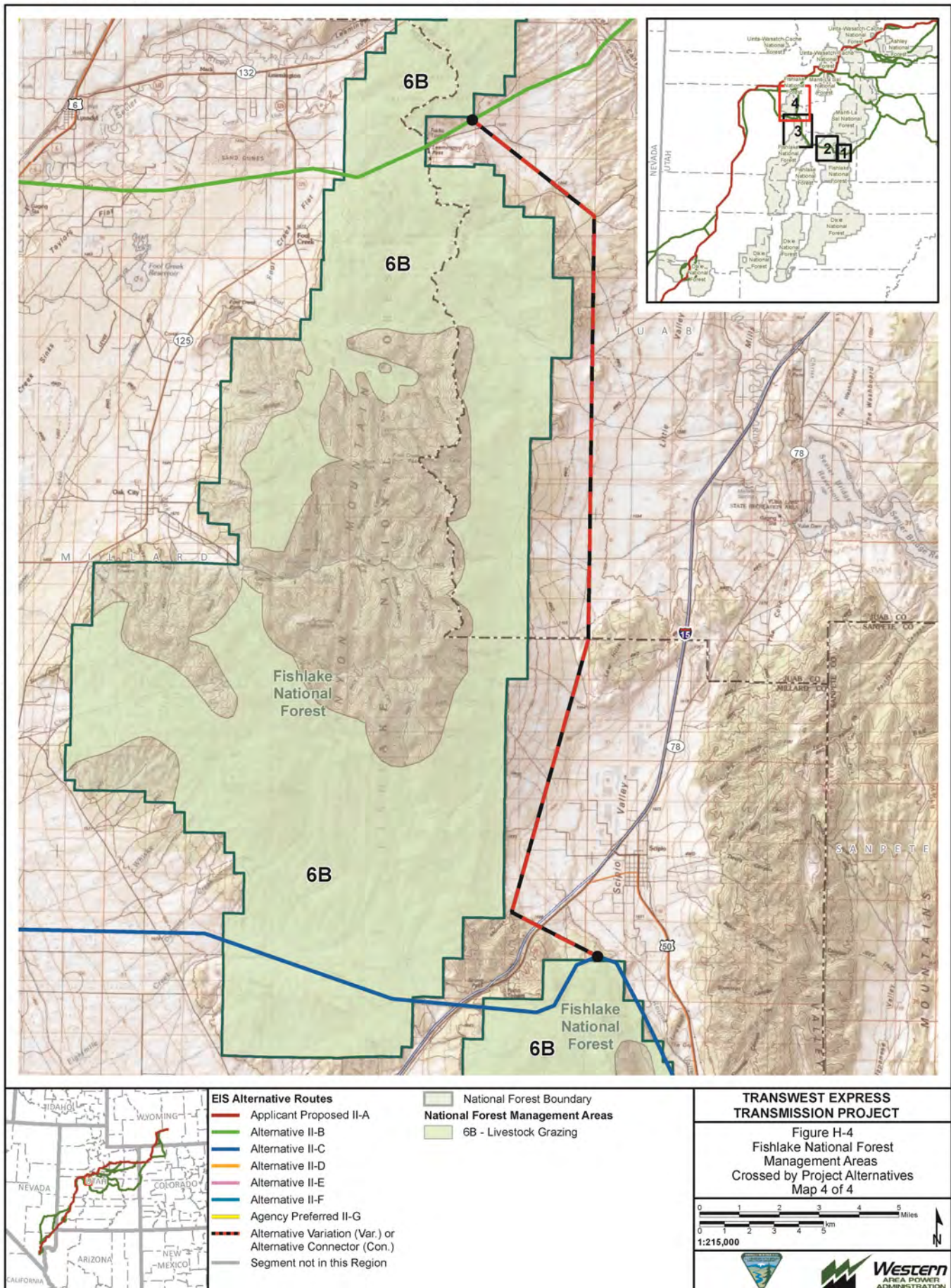
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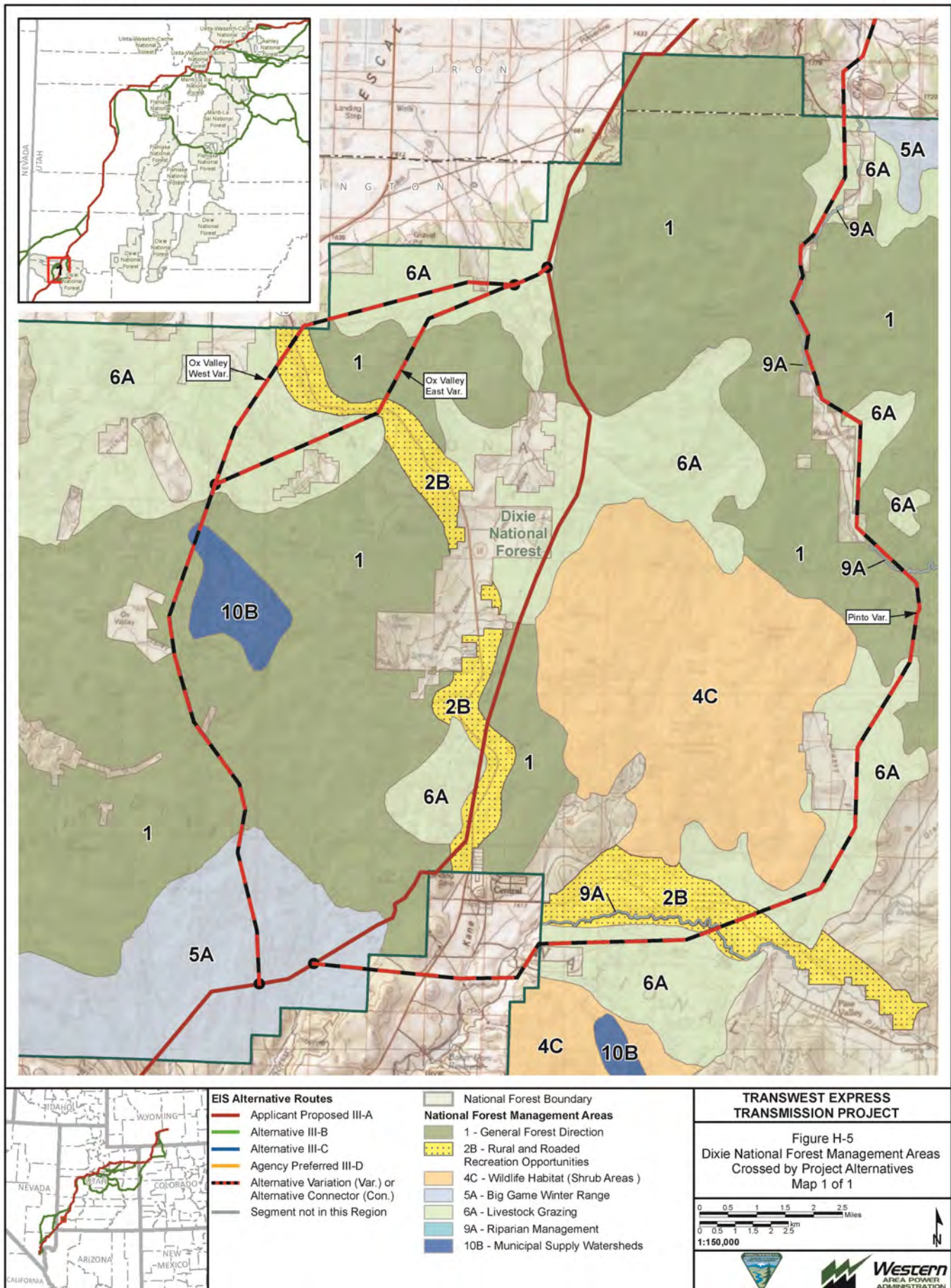


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