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Forest Service

Nebraska National Forests & Grasslands

Bessey Ranger District and Bessey Nursery

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Environmental Assessment and Finding of No Significant Impact

BESSEY COMPLEX DRAINAGE/WAREHOUSE/ GREENHOUSE PROJECT

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FINDING OF NO SIGNIFICANT IMPACT

After considering the environmental effects described in the Bessey Drainage/Warehouse/Greenhouse Assessment (EA), we have determined that the proposed action will not have a significant effect on the quality of the human environment based on the context and intensity of its impacts (40 CFR 1508.27). Therefore, an environmental impact statement will not be prepared.

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District Ranger
Bessey Ranger District
Nebraska National Forests & Grasslands

9 MAR 12
Date

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3/9/12
Date

We base our findings on the following:

The proposed action would implement activities that are of limited scope affecting only the immediate area within the Bessey Administrative Complex. The project would likely be implemented over a period beginning now up to eight years, depending on the availability of funding for building construction. The project was designed to minimize environmental effects through drainage improvement structures and constructing modern facilities aimed at energy conservation and improving nursery operations. The Forest Service found no significant issues or unresolved conflicts concerning alternative uses of available resources that warrant consideration of additional alternatives. Implementing regulations for NEPA (40 CFR 1508.27) provide criteria for determining the significance of effects. Significance, as used in NEPA, requires consideration of both context and intensity.

(a) Context. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale, rather than the world as a whole. Both short- and long-term effects are relevant (40 CFR 1508.27).

The effects of the proposed actions are limited in context. The project activities are limited in size (footprint limited to the area necessary to facilitate building construction) and duration

(drainage work will be done soon after the analysis is completed). Effects are local in nature and are not likely to significantly affect regional or national resources.

Design features are incorporated into the proposed action to minimize and avoid adverse impacts to the extent that such impacts would be almost undetectable and immeasurable, even at the local level.

Within the context of the landscape as a whole, the ecological consequences are not found to be significant in either the short- or long-term.

(b) Intensity. This refers to the severity of impact. The following ten aspects are considered in the evaluation of intensity (40 CFR 1508.27).

1. Impacts that may be both beneficial and adverse.

We considered beneficial and adverse impacts associated with the proposed action as presented in the Bessey Complex Drainage/Warehouse/Greenhouse Project. These impacts are within the range of effects identified within the Nebraska Land and Resource Management Plan. Based on the detailed specialist reports contained within the project file and summarized in the EA, we conclude that the specific direct, indirect, and cumulative effects of the proposed action are not significant, and this action does not rely on beneficial effects to balance adverse environmental effects.

No Effects
Project design and design features effectively eliminated or reduced to negligible most of the potential impacts, therefore, implementation of the proposed action would result in no effect to the following resources: Climate Change (EA, page 10); Air Quality (EA, page 12); Threatened, Endangered and Sensitive plants (EA, page 12), Western prairie fringed orchid; piping plover; whooping crane; least tern; pallid sturgeon and blowout penstemon; Recreation (EA, page 12); Heritage Resources (EA, page 13); Soil Productivity (EA, page 20).

Beneficial Effects
The Bessey Complex EA documents the following beneficial effects of implementing the proposed action:

- By controlling the location of the water flow to a terrestrially favorable dispersal point, as proposed under the drainage improvement plan, the Bessey Complex Campground should be safe from flooding. (EA, page 12) Protection of the campground means enhanced safety to the campers and day users and avoiding a campground closure due to flood damage.

- Construction of the greenhouses, head house and cooler will increase the production levels of the Bessey Nursery and make future operations more energy efficient. (EA, page 4)

- Water quality in the Middle Loup River is expected to improve because the proposed drainage improvement project will control runoff created during times of high precipitation which will reduce the delivery of sediment to the waterway. (EA, page 14)

Potential Adverse Effects

The American burying beetle (ABB) can be found on variable to level topography, well-drained soils, and well-formed detritus layer. ABB have been documented in or near emergent vegetation around wetlands in Nebraska sandhills. The species has been found in similar habitat in other parts of Nebraska. This species was first observed in the early 1990's within the Bessey administrative area, near the fishing pond just north of the present Bessey District Office. Several individual ABBs were captured between 2003-2006 during general absence/presence surveys in areas adjacent to the project area. Although considered an incidental observation, the area could be considered potential habitat (Reference: USDI Fish & Wildlife Service. 1991). Clearance protocols were conducted for three consecutive nights (August 8, 9, and 10, 2011) resulting in zero ABB captures. The project site is considered cleared until June 2012. Because of the possibility, although unlikely to occur, a "*may affect, not likely to adversely affect"* determination was made.

2. The degree to which the proposed action affects public health or safety

A portion of the River Loop of the Bessey Recreation Complex Campground and the day use area may need to be closed during installation of the drainage improvement facilities. Proper signage and posting of areas closed to the public will be done in the areas work activities are taking place and at the main office. The work will be scheduled as early as practicable in the spring before the summer tourist season begins. If the work does conflict with public use of the facility, those areas where work is being done will be closed off for public use to ensure their safety. (EA, page 13)

Construction of the warehouse and the approach road to the warehouse intersect Nebraska Highway 86B. This highway receives heavy use during the summer season as it serves as ingress/egress to the Nebraska 4-H Camp and sightseers going up to Scott Lookout Tower. Construction traffic coming from the warehouse construction site onto the highway could pose a risk to local and recreational traffic.

If a major rain event equal to, or greater than the one in 2010 should occur, there is a slim possibility ground saturation may slow the infiltration of standing water generated by the water collection facilities. The standing water could create temporary mosquito habitat. (EA, page 13) However, due to the high sand component, water is transmitted through the soil profile quickly and easily, causing it to be excessively drained (Soil and Water Resources report, page 8). Under normal drainage conditions, water should be absorbed into the ground fairly rapidly.

It is our determination that by closing portions of the campground where hazardous work is being conducted, coordinating with Nebraska Department of Roads (NDOR) to ensure highway safety requirements are met and barring major rain events, the project will have no adverse effects on human health and safety.

3. Unique characteristics of the geographic area, such as proximity to historic or cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas

All of the proposed project work is located within the Bessey Administrative Complex. The complex includes the Bessey Ranger District and the Bessey Nursery. These sites are eligible for inclusion on the National Register of Historic Places (NRHP). (Inventory and Evaluation of National Register of Historic Places Eligibility, Sept. 2006)

Although there is a huge cultural history associated with this complex, it is still a working ranger district and nursery. There is a need to provide employees with safe, energy efficient buildings to work in and still maintain the historical value of the site.

With applied design features, project activities will not adversely affect any known cultural sites. (EA, page 13) There is a park-like atmosphere about the day use area in the Bessey Recreation Complex, but it is a "natural appearing landscape" and not classified as parkland. (Nebraska Land and Resource Management Plan 2001 Revision, page 3-28) The project area does not contain any prime farmlands, wetlands, or ecological critical areas.

Based on this information, we conclude that the proposed action will have no effects on unique resources.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial

Based on the limited context of the project, our review of the public comments received, and the analysis documented in the EA and Project File, we do not find any controversial effects to the human environment. In the NEPA context, "highly controversial" does not encompass all public opposition to a proposed action, but instead only applies to a substantial dispute as to the size, nature, or effect of an action.[1]

We conclude that the effects of the proposed action are not considered highly controversial by professionals, specialists, and scientists from associated fields of forestry, wildlife biology, soils, botany, fisheries, and hydrology.

[1] Indiana Forest Alliance, Inc. v. United States Forest Service 325 F.3d 851 (10th Cir2003) citing Wetlands Action Network v. United States Army Corps of Engineers, 222 F.3d 1105 (9th Cir.2000); Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208, 1212 (9th Cir.1998) citing Greenpeace Action v. Franklin, 14 F.3d 1324, 1335 (9th Cir.1993)); Sierra Club v. United States Forest Service, 843 F.2d 1190, 1193 (9th Cir.1988) (accord); LaFlamme v. Federal Energy Regulatory Commission, 852 F.2d 389, 400-01 (9th Cir.1988)

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risk

Based on our review of public comments received on this project and the analysis documented in the EA and Project File, we conclude that there are no uncertain or unique characteristics in the project area which have not been previously encountered or that would constitute an unknown risk to the human environment.

A technical analysis (EA and Project File) that discloses potential environmental impacts (which is supportable with use of accepted techniques, reliable data, and professional judgment) has been completed, and we believe that the impacts of implementing this decision are within the limits that avoid thresholds of concern.

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration

The Bessey Complex Drainage/Warehouse/Greenhouse project is a site-specific project that does not set precedence for future actions or represent a decision in principle about future considerations. Any proposed future project must be evaluated on its own merits and effects. The proposed action is consistent with the Nebraska Land and Resource Management Plan and the capabilities of the land.

7. Whether the action is related to other actions with individual insignificant but cumulative significant impacts

Connected, cumulative, and similar actions have been considered and included in the scope of the analysis. The analysis accounts for past, present, and reasonably foreseeable future actions. Based on our review of the analysis and disclosure of effects in the EA, specialists' reports, Biological Assessments and Evaluations, and other analyses in the Project Record, we conclude that the Bessey Complex Drainage/Warehouse/Greenhouse project would not contribute potential cumulative adverse impacts. (EA, page 9)

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, or may cause loss or destruction of significant scientific, cultural, or historic resources

A comprehensive evaluation of cultural resources was conducted and the Forest archaeologist determined that there would be "*no adverse effects on the historic properties*". (EA, page 13) Specific design features are incorporated into the proposed action to minimize potential effects to known and not yet discovered cultural sites. In the event that such resources are discovered during project implementation, they will be evaluated and protected.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973

This project will have no effect on any threatened or endangered species or its habitat (refer to #1 above).

10. Whether the proposed action threatens a violation of Federal, State, or local law requirements imposed for the protection of the environment

The proposed action meets all federal, state, and local laws, including those for climate change (EA, page 8), air quality (EA, page 12), heritage resources (EA, page 13), water quality (EA, page 14), soil productivity (EA, page 20) and threatened and endangered species (EA, page 12 and 21). It also meets the National Environmental Policy Act disclosure requirements (Bessey Complex Drainage/Warehouse/Greenhouse EA).

The proposed action is consistent with the National Forest Management Act (NFMA) and the Nebraska Land and Resource Management Plan (NLRMP) 2001 Revision. Proposed activities are consistent with the standards, goals, and objectives of Management Areas 4.32 (Dispersed Recreation-High Use), 8.5 (Charles E. Bessey Nursery) and 8.6 (Administrative Sites) as determined in the NLRMP. This proposal does not require any Forest Plan amendments.

ENVIRONMENTAL ASSESSMENT

INTRODUCTION

The Bessey Complex Drainage/Warehouse/Greenhouses project area is located within the confines of the Bessey Ranger District and Bessey Nursery administrative complex. The complex is located one mile west of Halsey, Nebraska along Highway 2. The complex is accessed by turning south on Highway 86B. The complex houses the combined Bessey Ranger District and Bessey Nursery office building, parking lot, nursery fields and buildings, five residential houses and crew bunkhouse. The complex is known locally as "The Bessey Recreation Complex" because there is also a campground and picnic area that is open yearlong just south of the office building.

This project was designed to balance the need to address public safety, employee safety, recreation, resource protection, enhance indoor fleet storage, enhance energy efficiency and improve nursery efficiency while maintaining the scenic integrity and overall character of the area. From a recreation standpoint, one goal of the project is to control surface water runoff through the recreation area and avoid sediment deposits on campsites and erosion to the day-use parking area while not significantly changing the existing recreational experience.

The Forest Service has prepared this Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA), the Nebraska Land and Resource Management Plan 2001 Revision, 40 CFR 1508.9, 36 CFR 220.7, and other relevant federal and State laws and regulations. This EA discloses the project's foreseeable environmental effects for consideration in determining whether or not to prepare an Environmental Impact Statement. The reports cited in this EA and additional project documentation can be obtained from the project file located at the Bessey Ranger District in Halsey, Nebraska.

PURPOSE & NEED FOR ACTION

The Bessey Complex Drainage/Warehouse/Greenhouse Project includes six important focus areas that emphasize different objectives.

1) Drainage Control System
   - Construct a concrete drainage structure with outfall drainage and install three precast concrete catch basins with grates to collect surface water runoff before entering the Bessey Campground Cedar Loop and deposit in the flats behind the Bessey Ranger and Nursery Office.
   - Demolition of the existing concrete structure and a section of concrete parking area

- Backfilling, compacting and reconstruction of a section of the concrete parking area.
- Removal of existing plastic sheeting.
- Reshaping the current outfall drainage.
- Installation of a drivable grass mat system, gabion construction and a straw erosion control mat.
- All of the above listed items will be used to collect average and above average rain events that have created extensive erosion problems in the past. This system will collect the water with a series of catchments, direct the water to a flat, grass and tree covered area for dispersal and eventual ground absorption. This system should also eliminate a point source of sediment to the Middle Loup River.

2) Warehouse Construction
   - Construction of a warehouse facility that is energy efficient, sustainable and provides disabled access.
   - The facility will provide additional parking and protection of fleet vehicles.
   - An access road would be constructed to provide access to the facility off State Highway 86B.

3) Greenhouse Construction
   - Construction of a greenhouse complex covering .75 acre. This could consist of one large greenhouse or a series of gutter connected greenhouse structures located west of the existing greenhouses. The size and design varies with the different greenhouse construction companies. These greenhouses would be numbered #8 and/or #9.
   - Construction of two 30' wide by 96' long greenhouses numbered #6 and #7 that would be constructed within the same complex as greenhouses #3, #4 and #5.
   - These facilities will improve energy efficiency, reduce the nursery footprint by only producing one crop per year, provide healthier seedlings and to provide a safe working environment for employees.

4) Headhouse Construction
   - Construction of a new head house that is large enough to allow for all equipment to be stored in one location
   - A headhouse is a building that is base of operations for all of the greenhouse operations. The new structure will allow the nursery to increase the amount of seedlings they produce and supply for government agencies.

5) Cooler Construction
   - Construction of a cooler facility to increase storage capacity and to increase nursery efficiency.

6) Concrete Slab Construction

- Construction of the concrete pad will be done to facilitate the construction of the proposed new cooler.
- Construction of a second concrete slab will be done connecting the adjacent buildings to the new cooler.
- The addition of the concrete slabs will provide a hard, safe surface to facilitate forklift operations and to provide a solid foundation for the cooler.

Recreation: The Bessey Recreation Complex has low to heavy use throughout the entire year, depending on the weather and the season. The ranger district is a destination location for ATV riders because of a series of trails maintained for motorized travel by district personnel. The campground serves as the starting point for this unique recreation experience as ATV riders use the parking lot to unload their machines for day use activities. Campground spaces are rented throughout the week by those wishing to prolong their outdoor adventures on the district.

A large rain event in 2010 proved too much for existing drainage facilities to handle and caused extensive erosion to roads and trails on the district. A Forest order was issued that closed all roads and trails to motorized use. Luckily, the campground did not receive any unusual damage during this event and was not shut down as a result of it.

The location of the proposed catchment ditch is along the Cedar Loop of the Bessey Recreation Complex which should not impact any of the camping areas within this loop. The surface water will be channeled under the existing roads, through the day-use picnic area to the flat, densely treed section of the day use area for ground permeation.

By controlling the location of the water flow to a terrestrially favorable dispersal point, the campground should be safe from any seasonal event. There is a possibility the volume of water may reach the camping pads along the River Loop of the campground resulting in the closure of this portion of the campground in the interest of public safety. This is still more favorable than possible erosion damage to the steeper terrain of the Cedar Loop.

Construction of a new, larger warehouse will provide a central location to store all of the equipment necessary to maintain the Bessey Complex. It will also be large enough to house equipment and vehicles associated with the District fire and range programs. The new facility will be more energy efficient and will meet Section 504 of the Americans with Disabilities Act.

The slash generated from the warehouse clearing will be recycled. A portion of the material will be chipped and used as road stabilization material. The larger diameter trees may be decked at an approved location to be cut up as firewood by the public.

Water Resource Health: This same water event in 2010 deposited large deposits of sediment in the Middle Loup River and caused severe bank damage behind the existing office building. This was due to the sheer duration and volume of water generated by the storms. The concentrated volume of water ran down existing roads and yards, across the hardened

parking lot and created its own channel directly to the river. Continued health to the Middle Loup River and elimination of this new point source of erosion to the river system, is reliant on the structural control of the surface water by directing it away from this current point of least resistance.

The proposed drainage relief project would repair the existing hole in the stream bank. Additional actions include the dispersal and diversion of overland flow, slowing and spreading out the water as it flows overland and construction of catchment basins to catch runoff and sediment, thus reducing the amount of sediment delivered to the Middle Loup River.

Nursery Efficiency and Energy Conservation: Construction of the greenhouses, head house and cooler will increase the production levels of the Bessey Nursery and make future operations more energy efficient. The addition of the facilities will provide suitable space thus reducing the number of plantings during the year from two to one. The one planting can be conducted in January when the healthier seedlings are produced and eliminate the power and resources currently being needed for a second planting in March. The additional facilities will increase production of seedlings that are provided to other government agencies.

Heritage: The Bessey Nursery is currently listed on the National Register of Historic Places (NRHP) as an historic district (25TM11/TM00-1). The entire Area of Potential Effect (APE) for all of the proposed activities is located within the boundary of the Bessey Nursery Historic District (25TM11/TM00-1). The addition of the new buildings will modernize a working facility and yet still try to maintain the historical integrity of the site. The new warehouse will be designed to meet the same physical characteristics as the existing buildings. Building materials and colors will be similar to those of the existing structures.

Public Involvement

A scoping letter was mailed on Sept. 29, 2011 to 154 individuals, nearby landowners, professional organizations, local, state and other federal agencies, tribal leaders, environmental groups and media outlets who have previously requested notification about the types of activities included in this project.

A legal notice informing the public of the proposals and soliciting public comment was placed in the "*Omaha World Herald"* at Omaha and the '*North Platte Telegraph"* at North Platte on Sept. 27, 2011. The comment period for all avenues soliciting public participation closed on Oct. 27, 2011.

This project was added to the second quarter of the Fiscal Year 2012 (Jan. 01 to March 31, 2012) Nebraska Schedule of Proposed Actions (SOPA). The SOPA list can be found on the Nebraska World Wide Web under "Projects and Policies." Contact information for the IDT leader is listed and the public can submit comments concerning this project or solicit additional information. The project will remain on this list until a final decision is issued.

At the completion of the scoping period, eight letters had been received. A content analysis of the comments was completed on Nov. 17, 2011. The comments were grouped under the following four categories: 1) Against Project; 2) Project Support; 3) Request for Additional Information; and 4) Airspace Considerations. There were two respondents who opposed the project and opted for the "No Action" alternative. Their feelings were that the addition of the buildings would place an undo financial burden on the United States. There were also issues raised concerning the financial state of the United States that were beyond the scope of this analysis. The majority of the comments favored the modernization of the Bessey Compound facilities. All of the comments and the Forest Service response are included in Appendix C.

A letter and a copy of the "Response to Comments" were mailed to the eight respondents Dec. 9, 2011. The cover letter thanked the respondents for submitting comments and gave them an anticipated timeline for the completion of this EA and FONSI. They were also asked to contact the acting district ranger if they had any questions or concerns about how the Forest Service responded to the comments. There were no calls in response to the "Response to Comments" by any of the responders.

The Forest Service did not find anything in the response to comments requiring modification of the original proposal.

Issue Resolution

The Forest Service found no significant issues or unresolved conflict concerning alternative uses of available resources. No additional issues were identified that would require another alternative to address them. As stated above, most public comments received thus far on this project have been supportive, but some issues were expressed during scoping. These concerns are briefly addressed below. More thorough information is contained in the project file and/or the Environmental Effects section of this document.

***The Forest Service failed to acknowledge the effect this project would have on the financial state of the United States. There is a concern that these facilities are a "want" instead of a "need."*:** In order to operate within the guidelines of a dwindling budget, the Bessey Ranger District made the decision in 2009 to reduce the Forest Service presence at the Samuel R. McKelvie Forest and moved a lot of the equipment and materials normally housed at the McKelvie administrative site to the Bessey Ranger Station. The District also replaced the older, smaller, archaic equipment with newer, efficient and technically superior equipment. Modern fire engines, skidsteers, brushhogs, ATVs, UTVs plus attachments have been purchased since 1997 to increase efficiency, reduce labor and maintain a healthier forest. The cumulative effect of these efficiencies has tasked the district's storage capability to the maximum. They currently do not have the ability to store all this equipment out of the weather. Continued outdoor storage reduces longevity and continued operability thereby depleting budgets for maintenance and will result in early replacement and additional cost. The new warehouse will provide ample space to protect this public property.

The Forest Service can't take care of what it has at the Samuel R. McKelvie Forest or the Bessey Ranger District. There is a concern that the Forest Service is ignoring the land and should be more concerned with improving the rangeland habitat instead of the

***buildings*:** The Bessey Ranger District maintains an active land management program including thinning and burning to reduce the cedar infringement on the meadow areas and the forested sections. From 2002-2006, approximately 5,000 acres of land in a variety of allotment units were thinned with the removal of cedar as the primary species. Cedar was also removed from 295 acres in the Camp 5 South Allotment from 2007-2009. Another 614 acres were treated under the Coyote Thinning Project in 2010 under a service contract. The North Strip Allotment is currently being thinned of cedar with approximately 300 acres treated upon completion. The district has also burned 3,600 acres over the last three years to control cedar encroachment. This is a total of approximately 9,800 acres of cedar reduction management that has taken place over the last nine years. The equipment used by district crews to perform this work is part of what will be housed in the warehouse proposed for construction. It is important to store this equipment out of the harsh Nebraska elements in a structure where they can be maintained and also increase their longevity.

There has not been as active a program at McKelvie as there has been on the Bessey side of the district. The district plans to begin the planning and analysis in 2013 to increase the land management activities at McKelvie. This will include a prescribed fire and fuels reduction program to address cedar infringements. This future planning will include public scoping and compliance with the National Environmental Protection Act (NEPA). The public will have an opportunity to provide their input on what areas and methods of treatment they would like to see performed.

ALTERNATIVES

Section 102 (2)(E) of the National Environmental Policy Act (NEPA) requires the Forest Service to study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources. The Forest Service did this with the No Action and Proposed Action alternatives described below. Design features were developed up front to anticipate and reduce the effects from the proposed action on the environment and to address and resolve the issues described above.

ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

The intent from the beginning of this analysis was to keep the scope of the project as simple as possible. The original intent of this EA was only to analyze the effects of the drainage construction project environmental impacts. However, the district decided to take a holistic approach in order to expand the cumulative effects analysis to include all proposed future activities within the complex. The construction of a new warehouse, greenhouses, headhouse, cooler and all other items associated with the upgrading of the nursery were added to the purpose and need. No other alternatives have been proposed as a result of the scoping or suggested during interdisciplinary team meetings. Therefore, no other alternatives were considered other that those addressed below.

NO ACTION (Alternative 1)

This alternative provides a baseline for comparison of environmental consequences of the proposed action to the existing condition and is a management option that could be selected by the Responsible Official. The results of taking no action would be the current condition as it changes over time due to natural forces.

This alternative does not alter the current site condition and future large rain events will continue to travel the traditional path of least resistance and increase the size of the eroded channel into the Middle Loup River. The nursery will continue to operate using the current facilities. This alternative proposes no actions that are contained in the proposed action.

PROPOSED ACTION (Alternative 2)

The proposed action would achieve the purpose and need by implementing the actions described in detail below, as shown on the Administrative Site Map (APPENDIX A) and displayed in the engineer's Drainage Control Drawings (APPENDIX B).

The proposed action does not require any forest plan amendment in order to be implemented.

DESIGN FEATURES

Watershed Health

Drainage Control System

1) Remove a 7' by 19' by 6" thick section of the existing concrete parking lot behind the Bessey Office due to cracking and undermining. Place and compact backfill and new concrete, tying it into the existing concrete with #5 rebar as shown on APPENDIX B - Sheet 3 of 7.
2) Construct a concrete drainage structure as shown on APPENDIX B - Sheet 3 of 7 including a drivable grass mat system and two sets of 2' by 2' by 4' gabion baskets to provide bank stabilization of the Middle Loup River.
3) Install three 4' high by 6' long by 4' wide precast concrete catch basins (#A, #B and #C) with 3' by 5' grates in accordance with APPENDIX B - Sheet 5 of 7 to collect surface water runoff before entering the Bessey Campground Cedar Loop.
4) Install 24" diameter corrugated metal pipe to pass collected water from catch basin #A to #B as shown on APPENDIX B - Sheet 5 of 7.
5) Install 30" diameter corrugated metal pipe to pass collected water from catch basin #B to #C as shown on APPENDIX B - Sheet 5 of 7.
6) Construct hardened ditches, concrete aprons and PVC drain pipe as shown on APPENDIX B - Sheet 5 of 7 and Sheet 6 of 7 to facilitate the water collection and drainage system.
7) Construct an 8' wide main lawn swale, 24" deep with a Drivable Grass Mat system in the bottom and 3:1 side slopes as shown on APPENDIX B - Sheet 7 of 7.

8) Construct a 4’ wide trench drain lawn swale, 24” deep with a Drivable Grass Mat system in the bottom and 3:1 side slopes as shown on APPENDIX B - Sheet 7 of 7.
9) Construct a 4” thick by 4’ wide concrete sidewalk at the location shown on APPENDIX B- Sheet 2 of 7.
10) Use Forest Service approved seed mix to re-vegetate all of the disturbed areas and place straw erosion control material over seed where designated in the drawings.
11) All of the above listed items will be used to collect average and above average rain events that have created extensive erosion problems in the past. This system will collect the water with a series of catchments, direct the water to a flat, grass and tree covered area for dispersal and eventual ground absorption. This system should also eliminate a point source of sediment to the Middle Loup River.

Recreation

Bessey Recreation Complex

1) The Drainage Control System to be installed as detailed in “*Watershed Health”* above should control how the surface water runoff works its way through the Bessey Recreation Complex. The system will reduce the risk of erosion to existing camping pads and public facilities.
2) The Drainage Control System will direct water from overnight campground facilities for dispersal in the day use areas.
3) Preventing wide scale damage to the complex facilities will prevent future closure of the recreation facilities creating impacts to the recreational public and loss of revenue from campground receipts.

Warehouse Construction

1) Construct an approximately 55’ wide by 90’ long warehouse west of the Bessey District bunkhouse. Construction shall include all clearing, excavation, plumbing, electrical, landscaping and parking lot construction to provide storage and a safe working environment for Bessey Ranger District vehicles, equipment and personnel. The estimated parking lot size is 60’ wide by 100’ long.
2) Clearing shall include the felling, bucking, grubbing and disposal of approximately one acre of non-merchantable Black Locust trees at the location shown in APPENDIX A to facilitate the bunkhouse, parking lot and access road construction. A portion of the generated slash shall be disposed of by chipping for recycling as road stabilization material on Forest Road 203 west. Trees not chipped may be decked for use by the public as fire wood at the Sand Pit at M.P. 2.40 on Highway 86B. All material not use for recycling will also be hauled to the Sand Pit location for burning by the Forest Service.
3) The building’s architectural design, construction materials and exterior colors will be similar to those of the existing historic buildings. The building should possess the same visual attributes as those of the surrounding structures.
4) Construct a 14’ wide access road beginning at M.P. 0.96 of State Highway 86B and ending at the warehouse.

Nursery Efficiency and Energy Conservation

1) Construct a greenhouse complex covering 0.75 acre. This could consist of one large greenhouse or a series of gutter connected greenhouse structures located near the existing greenhouses. The size and design varies with the different greenhouse construction companies. These greenhouses would be numbered #8 and/or #9 as shown in the Administrative Site Map APPENDIX A.
2) Construct two 30' wide by 96' long greenhouses numbered #6 (2880 ft2) and #7 (2880 ft2) that would be constructed within the same complex as greenhouses #3, #4 and #5 as shown in APPENDIX A.
3) Construct a 40' wide by 60' long head house (2400 ft2) to allow for all equipment to be stored in one location as shown in APPENDIX A.
4) Construct a 25' wide by 37' long cooler facility and a 9' wide by 92' long concrete approach and support pad as shown in APPENDIX A.

Heritage

1. Heritage program personnel would monitor ground disturbing actions during all ground disturbing activities to ensure that if any sites are discovered they would be protected. Refer to the heritage report in the Project File for site specific details.

2. Following implementation, heritage program personnel would inspect known cultural sites to assess conditions and determine if any follow-up actions are needed.

ENVIRONMENTAL EFFECTS

This section provides a summary of the environmental effects of the proposed action. It provides the necessary information to determine whether or not to prepare an environmental impact statement. The associated Finding of No Significant Impact (FONSI) discusses whether the proposed action has significant effects. Further analysis and conclusion about the potential effects are available in reports for each resource and other supporting documentation cited in those reports. These documents are contained within the project file, which is available at the Bessey Ranger District and Nursery office in Halsey, Nebraska.

Consistent with 36 CFR 220.4(f) and CEQ guidance, the past, present, and reasonably foreseeable actions were considered for analysis of cumulative effects where appropriate for each resource. Past actions considered in cumulative effects analysis include those that contributed to establishing the baseline conditions of the project area today. Past management activities associated with the Bessey Complex within the project area include construction of the new office building and parking lot, foot bridge across the Middle Loup

River, removal of a swimming pool, removal of tennis courts, campground improvements and prescribed burning. Most of these activities have occurred within the last 10 years.

Currently within and adjacent to the project area, there are several reasonably foreseeable future actions, which include:

- Decommissioning of both historic and non-historic buildings.
- Restoration of the old Bessey Office building as a public attraction under the Passport in Time (PIT) program.
- Conversion of the Old Bessey Nursery Office into a storage building
- Thinning and prescribed burning to reduce natural fuel buildup and improve plant vigor around the perimeter of the Bessey administrative site.

CLIMATE CHANGE

Federal Policy. "In order to create a clean energy economy that will increase our Nation's prosperity, promote energy security, protect the interests of taxpayers, and safeguard the health of our environment, the Federal Government must lead by example. It is therefore the policy of the United States that Federal agencies shall increase energy efficiency; measure, report, and reduce their greenhouse gas emissions from direct and indirect activities; conserve and protect water resources through efficiency, reuse, and storm water management; eliminate waste, recycle, and prevent pollution; leverage agency acquisitions to foster markets for sustainable technologies and environmentally preferable materials, products, and services; design, construct, maintain, and operate high performance sustainable buildings in sustainable locations; strengthen the vitality and livability of the communities in which Federal facilities are located; and inform Federal employees about and involve them in the achievement of these goals." (Executive Order 13514 of Oct. 5, 2009)

Department of Energy (DOE) recently updated the requirements for energy efficiency in new Federal commercial and multi-family high-rise residential buildings (10 CFR 433: *Energy Efficiency Standards for the Design and Construction of New Federal Commercial and Multi-family High-Rise Residential Buildings*). A new final rule was issued on August 10, 2011 and became effective on October 11, 2011. The new rulemaking updates the baseline standard in 10 CFR 433 to ANSI/ASHRAE/IESNA Standard 90.1-2007.

The final rule establishes a requirement for new Federal buildings to achieve a level of energy efficiency 30 percent greater than 90.1-2007 when life-cycle cost-effective. If the additional 30 percent savings is not life-cycle cost-effective, an agency must evaluate the cost-effectiveness of alternate designs at successive decrements below 30 percent (e.g., 25%, 20%, etc.) in order to identify the most life-cycle cost-effective design for that building. Life-cycle cost-effectiveness is to be established using the methodology defined in 10 CFR Part 436, subpart A.

The design for the warehouse building will be contracted. The terms of the design contract include features that will meet the 30 percent energy efficiency requirement using modern technology for space heating, space cooling, ventilation, service water heating, lighting and

all other energy consuming systems normally specified as part of the building design except for receptacle and process loads.

Also part of the 30 percent reduction will be recycling of the slash generated from the warehouse and parking area clearing. The material will be chipped and used as road stabilization material on the Forest Road 203 west. The remaining slash will be stacked for firewood that will be available to the public or hauled to the Sand Pit site at M.P. 2.40 on Highway 86B.

The construction of the greenhouses will improve the energy efficiency of the nursery by increasing production of seedlings to government agencies and allow for equipment to be in one location to eliminate start-up/shut down time when moving equipment. The additional buildings will further reduce the nursery footprint by providing enough space to reduce the number of yearly plantings from two to one.

Other Contextual Considerations

There will be approximately one acre of clearing associated with the warehouse construction. This includes the removal of approximately 100 Black Locust trees. Other factors also indicate that, in this case, further analysis is not necessary or warranted. The top three anthropogenic (human-caused) contributors to greenhouse gas emissions (from 1970-2004) are: fossil fuel combustion, deforestation, and agriculture (IPCC 2007, p. 36). Land use change, primarily the conversion of forests to other land uses (deforestation) is the second leading source of human-caused greenhouse gas emissions globally (Denman et al. 2007, pg. 512). Loss of tropical forests of South America, Africa, and Southeast Asia is the largest source of land-use change emissions (Denman et al. 2007, pg. 518; Houghton 2005).

Unlike other forest regions that are a net source of carbon to the atmosphere, U.S. forests are a strong net carbon sink, absorbing more carbon than they emit (Houghton 2003; US EPA 2010, pg. 7-14). For the period 2000 to 2008, the net carbon sequestration of U.S. forests was more than 481.1 teragrams (1 teragram = approximately 2.2 billion pounds) of carbon per year, with harvested wood products sequestering an additional 101 teragrams per year (Heath et al. 2011). Our National Forests accounted for approximately 30 percent of that net annual sequestration. National Forests contribute approximately 3 teragrams carbon dioxide to the total stored in harvested wood products compared to about 92 teragrams from harvest on private lands. Within the US, land use conversion from forest to other uses (primarily for development or agriculture) are identified as the primary human activities exerting negative pressure on the carbon sink that currently exists in this country's forests (McKinley et al. 2011; Ryan et al. 2010; Conant et al. 2007).

The Bessey Complex Drainage/Warehouse/Greenhouse project does not fall within any of these primary contributors of global greenhouse gas emissions nor is it similar to the primary human activities exerting negative pressure on the carbon sink that currently exists in US forests. The affected forests would remain forests, not converted to other land uses, and long-term forest services and benefits would be maintained.

One of the objectives to constructing modern, energy efficient facilities is to reduce the overall footprint of the Bessey Nursery and reduce energy needs. None of the individual buildings being constructed or the complex as a whole, meet the definition of a major stationary source of air pollutants as defined in Title 129-Nebraska Air Quality Regulations (NAQR); Chapter 2; Section 002 (see project file for full chapter text). "A major stationary source of air pollutants is one that directly emits or has the potential to emit, 100 tpy or more of any air pollutant (including major source of fugitive emissions of any such pollutant, as determined by rule by the Administrator of EPA)." We do not anticipate any type of air pollutant being released into the air.

The ambient air quality standards for the State of Nebraska are listed in Title 129-NAQR; Chapter 4; Sections 001-006 (see project file for full chapter text). We do not anticipate exceeding any of the standards listed.

Minimal burning may be required to dispose of clearing slash generated from the warehouse construction. This will be done by the Forest Service during a time period when air quality conditions are optimum. Therefore, there may be minimal, short term effects to the air quality.

Threatened, Endangered, and Sensitive Plants

The project would have no effect on any federally listed Endangered or Threatened plants because no habitat for them occurs in or near the project area (US Forest Service 2012. Biological Assessment). The threatened Western Prairie Fringed Orchid (Platanthera praeclara) and the endangered Blowout penstemon (Penstemon havdenii) were not found within the project area.

Forest Service sensitive plant species, identified by the Regional Forester, are species for which population viability is a concern. There are no known sensitive plant species found within the project area (US Forest Service 2012. Biological Evaluation).

Recreation

Recreation visitors to the Bessey Recreation Complex number approximately 5,500 per year (Recreation report, page 5). This is a fee facility that sees extensive day and overnight use as a destination location for ATV riders and tourists traveling through Nebraska on State Highway 2. The drainage improvements to the site are not being proposed as a method to increase the use of existing facilities. There may be safety issues and resource impacts to consider by collecting the water and routing it through the day use area. No effects are anticipated from the construction of the nursery buildings or the warehouse.

Safety

The direct effects of the drainage project are that the amount of water (approximately 14 acres of rainwater) traversing through the ditch to the diversion berm could turn any standing water in the area between the day use area and the two campsites on River Loop campground into a breeding habitat for mosquitoes (Recreation report, page 5). However, the project area contains one primary soil map unit, the Meadin Loamy Sand (Soil Key 3249). Due to the high sand component, water is transmitted through the soil profile quickly and easily, causing it to be excessively drained (Soil and Water Resources report, page 8). Under normal drainage conditions, water should be absorbed into the ground fairly rapidly. Under conditions such as those in 2010, there is going to be standing water for a period of time in this area whether the drainage improvements are in place or not.

Another direct effect may be the need to close a portion of the campground and day use area to provide for public safety during the construction process. Depending on the type of equipment being used, the type of work being done and the proximity to the high-use areas, temporary closure of those areas may be done. We do not anticipate the closure of the entire campground and day use area to public use during construction.

Existing Resource Impacts

Huge accumulations of water that exceed the volume generated in the 2010 storm could go beyond the anticipated boundaries of the absorption zone and flood two campsites in the River Loop. This could result in erosion to the two sites and the temporary loss of their use by the public (Recreation report, page 5). Again, as addressed in *Safety* above, if that type of an event occurs, chances are likely damage will occur whether the drainage improvements are in place or not.

Heritage Resources

An "intensive cultural resources inventory of 78 acres of land" comprising the Bessey Administrative Site was done in 2003 and 2004 for the construction of a new office building. The results of that investigation were documented in January, 2005 as *An Extensive Cultural Resources Inventory of the Bessey Office, Bessey Ranger District, Nebraska National Forest, Thomas County, Nebraska* (Archaeologist report). The Area of Potential Effect (APE) includes all of the proposed activities and construction. The APE is located within the Bessey Nursery Historic District (25TM11/TM00-1).

West Shop

The Forest Archaeologist conducted a records search of all previous projects and previously recorded sites in April 2011. A cultural resources surface survey covering the entire APE for the project was conducted in 2004. No cultural resources are located within the APE. The Forest Archaeologist determined the construction of the West Shop will not directly affect the use and historic integrity of the existing historic structures on the district. The new structures will be designed such that they blend in with the rest of the extant buildings

located in the historic district. If these stipulations and project specifications are followed it is the opinion of the Forest Archaeologist these additions to the site will not adversely affect those characteristics that make the Bessey Recreation Complex eligible for listing in the National Register of Historic Places (Cover consultation letter to Nebraska SHPO).

A letter was sent to the Nebraska State Historic Preservation Office (SHPO) on May 6, 2011 for concurrence on a "*finding of no historic properties affected.*" Concurrence was received on May 23, 2011.

Bessey Recreation Complex Drainage Installation

The acting forest archaeologist conducted a records search of all previous projects and previously recorded sites in Sept. 2011. Two cultural resources surface surveys covering the entire APE were conducted in 2003 and 2006. None of the cultural resources noted in either of these reports are located within the current project APE. The acting forest archaeologist determined the installation of the proposed drainage controls will not directly affect the use and historic integrity of the existing historic structures on the district. If project specifications are followed it is the opinion of the acting archaeologist these additions to the site will not adversely affect those characteristics that make the Bessey Recreation Complex eligible for listing in the National Register of Historic Places (Cover consultation letter to Nebraska SHPO).

A letter was sent to the Nebraska State Historic Preservation Office (SHPO) on Sept. 7, 2011 for concurrence on a "*finding of no historic properties affected.*" Concurrence was received on Sept. 30, 2011.

Cooler and Greenhouse Construction

The acting forest archaeologist conducted a records search of all previous projects and previously recorded sites in Sept. 2011. None of the cultural resources noted in this report are located within the current project APE. The acting forest archaeologist determined the construction of the cooler and the greenhouses will not directly affect the use and historic integrity of the existing historic structures on the district. The new structures will be designed such that they blend in with the rest of the extant buildings located in the historic district. If these stipulations and project specifications are followed it is the opinion of the acting archaeologist these additions to the site will not adversely affect those characteristics that make the Bessey Nursery eligible for listing in the National Register of Historic Places (Cover consultation letter to Nebraska SHPO).

A letter was sent to the Nebraska State Historic Preservation Office (SHPO) on Oct. 18, 2011 for concurrence on a "*no adverse effect on the historic properties.*" Concurrence was granted on Nov. 9, 2011.

Hydrology and Water Quality

Effects to water resources were considered for the one 6th level watershed of Town of Halsey-Middle Loup River (HUC #102100011003). Effects to water yield and flow regime;

stream channel stability and floodplains; water quality; and wetlands and riparian areas are discussed for each alternative. (Soils and Water Resources report, page 14)

Effects to water resources were analyzed for a 20-year time period beginning in the year 2012 and extending through 2032. The year 2012 was chosen as a starting point for analysis because project implementation could potentially begin as soon as spring 2012. The year 2032 was chosen as an ending point in time because effects to water resources can often lag behind original disturbances and climatic patterns play a key role in determining the magnitude, timing, and duration of effects to water resources. For example, effects may not be observed immediately following disturbances or may be intermittent in nature due to other influences (i.e. climate patterns, etc). Additionally, cycles of drought or wet periods may exacerbate or obscure impacts to water resources depending on the water resource indicator. As an example, drought periods can exacerbate a minor water quality impact; whereas wet periods may completely obscure that same water quality impact due to the increased flow that dilutes the contaminant. Conversely, increased runoff and flow during wet periods can also increase water quality impacts due to more contaminants being carried in runoff.

The proposed activities are within a municipal water supply watershed. A municipal supply watershed is defined by Forest Service Manual (FSM) 2542 as a watershed that serves a public water system as defined in the Safe Drinking Water Act of 1974, as amended (42 U.S.C. {} 300f, et seq.) or as defined in state safe drinking water statutes or regulations. The public school in Halsey and the Double T bar has a public water system while the town of Halsey does not (Allen, 2012). The well associated with the Halsey school is located next to it.

The drainage improvements proposed are intended to reduce the sediment load entering the Middle Loup River and to allow surface water generated through normal precipitation the opportunity to be absorbed into the ground. There are instances where the "No Action" alternative will not resolve the current erosion problems. Therefore, a thorough effects analysis was conducted of both alternatives. (Soils and Water Resources report)

Water Uses and Rights

Alternative 1 – No Action

Under the No Action Alternative, no changes in water rights would occur, nor would any current water rights in the general vicinity be threatened.

Alternative 2

All of the associated wells in close proximity to the proposed projects belong to the United States of America; Department of Agriculture; Forest Service. Therefore, no impacts to non-federal water rights holders are expected.

Cumulative Effects

No cumulative impacts to non-federal water rights holders are expected to result from any project alternatives. Since there are no direct or indirect effects to water rights resulting from either alternative, this project would not contribute to cumulative effects to existing or future water rights.

Groundwater

Alternative 1 – No Action

Under the No Action Alternative, no change would happen to the existing infrastructure thus no groundwater damage would occur. Natural processes would continue to influence the groundwater recharge and chemistry depending on climatic cycles.

Alternative 2 – Proposed Action

Under Alternative 2, there would be an increase in the amount of groundwater currently being used due to the additional infrastructure, shop and greenhouse. The proposed new facilities would be connected to the already existing pipes that feed the other buildings and would provide more access points to water. No new groundwater wells or other groundwater withdrawals are being proposed by this project. Negative impacts to groundwater yields are not expected because the increase in water use would be relatively small over the current usage, and is not expected to cause drawdown of other wells or the groundwater table as a whole. Activities associated with the Proposed Action will not affect water systems in the town of Halsey which is located downstream and down gradient of the project area.

Cumulative Effects

A review of past, present, and reasonably foreseeable future actions was conducted to evaluate potential cumulative effects that could occur to groundwater resources from the previously listed actions in combination with activities proposed under each alternative. No cumulative impacts to groundwater are anticipated because other activities occurring on Federal lands and within the groundwater resources analysis area do not directly or indirectly impact groundwater resources.

Streams and Floodplains

Alternative 1 – No Action

Under the No Action Alternative, river flow could be altered due to the continued, unabated runoff from the surrounding administrative site and present infrastructure, roads, parking areas and campgrounds. High amounts of sediment are being delivered directly to the Middle Loup River from overland flow and will continue to do so, potentially increasing in amount over time, until runoff and erosion control measures are put in place. This would contribute additional sediment to the already sediment-laden Middle Loup River and exacerbate its current braided river channel conditions, thus also affecting river flow.

This Alternative would **not** meet Forest Plan (USDA Forest Service, 2009a) direction to:

- Protect and manage the riparian ecosystem. Maintain the integrity of the ecosystem including quantity and quality of water (**Standard**);
- Conduct actions so that stream pattern, geometry, and habitats are maintained or improved toward robust stream health (**Standard**); or
- Manage land treatments to conserve site moisture and to protect long-term stream health from damage by increased runoff (**Standard**).

Alternative 2 – Proposed Action

Under Alternative 2, the Middle Loup River will be both directly and indirectly affected by the proposed actions in a beneficial way. Proposed runoff and erosion control measures have been designed to reduce the amount of sediment that is currently being delivered directly to the Middle Loup River. Proposed runoff and erosion control measures include bank repair and stabilization near the district parking lot. This work would repair an existing hole in the stream bank that had developed from years of runoff problems at this particular location that created a gully from the parking area to the Middle Loup River. This site is also the main source of sediment being delivered to the river. Additional actions include the dispersal and diversion of overland flow, slowing and spreading out the water as it flows overland; and catchment basins to store runoff and sediment, thus reducing the amount of sediment delivered to the Middle Loup River.

This Alternative meets all Forest Plan direction. This project meets the intent of Executive Order 11988 in regards to floodplain management. Although floodplains are associated with every stream and river, no 100-year floodplains have been mapped within the project area or downstream of the project area as part of the FEMA mapping effort (FEMA, 2012) – largely due to the unique characteristics of Sandhill's rivers. Although the current Bessey Administrative site and Nursery are located on a floodplain, and all proposed activities would take place on this same floodplain, it would take an event much larger than the 100 year flood to inundate this area. Furthermore, the project will be trying to limit the amount of sediment being delivered to the existing floodplain and the Middle Loup River.

Cumulative Effects

A review of past, present, and reasonably foreseeable future actions was conducted to evaluate potential cumulative effects on streams and floodplains in combination with activities proposed under each alternative. Cumulative effects associated with Alternative 1 – No Action include a continuation and possibly an increased of negative effects to stream channels and floodplains because runoff and erosion control measures would not be implemented. Thus increased runoff would continue to occur unabated during extreme rainfall events, causing soil erosion and sediment delivery to the Middle Loup River and its floodplain.

However, a cumulative net benefit to streams and floodplains is expected with Alternative 2 as runoff and erosion control measures would be implemented, thus reducing sediment delivery to the Middle Loup River and its floodplain. Additionally, Best Management Practices (BMPs) associated with other Federal activities taking place at the Bessey Administrative site would cumulatively contribute to on-site soil stabilization, on-site runoff control, and on-site sediment storage.

Water Quality

Alternative 1-No Action

Under the No Action Alternative, no new water facilities would be constructed nor would existing facilities be improved. Therefore both surface, and ground water features, including the Middle Loup River, would be unaffected and water quality would remain in its current state. Large amounts of sediment would still be delivered to the Middle Loup River from the surrounding landscape, roads, camp grounds and parking areas during high intensity rainfall and runoff events.

This Alternative would **not** meet Forest Plan (USDA Forest Service, 2009a) direction to:

- Apply runoff controls to disconnect pollutant sources from surface and ground water (**Standard**);
- Protect and manage the riparian ecosystem. Maintain the integrity of the ecosystem including quantity and quality of water (**Standard**); or
- Manage land treatments to conserve site moisture and to protect long-term stream health from damage by increased runoff (**Standard**).

Alternative 2

No negative impacts to surface or ground water quality are anticipated to result directly or indirectly from implementation of Alternative 2. The implementation of this project will not affect municipal water supplies or neighboring private wells because none of the proposed activities are within municipal watersheds or in close proximity to privately owned wells. Additionally, none of the project activities take place in the well head protection areas.

Water quality in the Middle Loup River is expected to improve with the Proposed Action. One of the proposed projects is to control runoff created during times of high precipitation to minimize soil erosion, and prevent sediment delivery to the Middle Loup River. Proposed project activities would reduce sediment and other contaminants introduced into the Middle Loup River through runoff and erosion control measures and by replacing the existing septic tank and leach field with a septic system tied to the wastewater lagoons already onsite. Due to the inherent nature of the Sand Hills region, surface waters and groundwater are known to mix with each other. Therefore, the proposed improvements may provide additional protection to the Halsey water supplies. This Alternative is consistent with all Forest Plan direction.

Cumulative Effects

Negative cumulative impacts to water quality in the Middle Loup River may still occur with Alternative 1 – No Action as described previously.

A cumulative improvement to the water quality in the Middle Loup River is expected with the implementation of Alternative 2 – Proposed Action. No negative cumulative impacts to surface and ground water quality is anticipated with Alternative 2 because design criteria and Watershed Conservation Practices apply to all activities on Federal lands and thus minimize the impacts of other activities not associated with the Bessey Project.

Water quality monitoring of the Middle Loup River will continue to take place at the Bessey Ranger District site regardless of which alternative is chosen.

Wetlands and Riparian Areas

Alternative 1-No Action

Under the No Action Alternative, no new impacts to wetlands and riparian areas would occur. Therefore there would be no direct or indirect affects wetlands and riparian areas.

This Alternative would **not** meet Forest Plan (USDA Forest Service, 2009a) direction to:

- Protect and manage the riparian ecosystem. Maintain the integrity of the ecosystem including quantity and quality of water (**Standard**).

Alternative 2 – Proposed Action

No negative impacts to wetlands or riparian areas would occur directly or indirectly related to the implementation of Alternative 2 because no activities are proposed in wetlands or riparian areas. Proposed activities avoid wetland locations, so no alteration of any wetland is expected to occur. Additionally, Design Criteria has been included to protect all wetlands in the Bessey Project (Appendix B). These measures apply to all wetlands in the Project Area, regardless of whether each individual wetland meets the regulatory definition of "jurisdictional wetland." Therefore no dredging or placement of fill material would occur in any wetland. Therefore, no consultation with the U.S. Army Corps of Engineers regarding wetlands is necessary, and no permitting under Section 404 of the CWA is necessary. Appropriate permits will be obtained from the State of Nebraska and/or the U.S. Army Corps of Engineers should there be any change in construction plans that would affect wetlands discovered during project implementation.

The amount of sediment that is currently being delivered to the Middle Loup River and corresponding wetlands and riparian areas would be diminished for the reasons described previously. This Alternative is consistent with all Forest Plan direction.

Cumulative Effects

Negative cumulative impacts to wetlands and riparian areas associated with the Middle Loup River may still occur with Alternative 1 – No Action as described previously. Excess sediment loading would still occur during runoff events, adding to the already high sediment loading from both natural and man-made activities in the watershed.

A cumulative improvement to the wetlands and riparian areas associated with the Middle Loup River is expected with the implementation of Alternative 2 – Proposed Action due to the decrease in sediment delivered to the river and floodplain areas. No negative cumulative impacts to wetlands and riparian areas is anticipated with Alternative 2 because design criteria and Watershed Conservation Practices apply to all activities on Federal lands and thus minimize the impacts of other Federal activities that take place at the Bessey Administrative site.

Soil Productivity

The analysis area for effects to soils includes only the proposed activity units because impacts to soils occur on the site and do not accumulate outside of the activity area. Effects to soils were analyzed for a 10-year time period beginning in the year 2012 and extending through 2022. The year 2012 was chosen as a starting point for analysis because project implementation could potentially begin as soon as the year 2012. The year 2022 was chosen as an ending point in time to allow for timing of construction activities (including delays) and because most soils tend to recover within 3-5 years following disturbance when rehabilitation measures are applied (i.e. seeding, etc).

Alternative 1 – No Action
Under the No Action Alternative, the proposed project would not be implemented and thus no additional soil disturbance would occur. Thus no direct effects to soils would occur. Indirect effects to soils may still occur in the form of continued erosion and off site transport during runoff events.

Alternative 2 – Proposed Action
Soils would be directly disturbed during construction of new facilities. Furthermore, project design criteria, BMPs and Watershed Conservation Practices are included to limit soil disturbance, minimize soil erosion, and re-establish ground cover following proposed activities. Proposed actions are designed to reduce current soil erosion and off-site transport and therefore would improve soil stability at the site as well as water quality in the Middle Loup River. Sediment that is currently being delivered to the river will be trapped in catch basins. Catchments would be cleaned out periodically to ensure proper function and maintain storage capacity.

Cumulative Effects
A review of past, present, and reasonable foreseeable future actions was conducted to evaluate potential cumulative effects that could occur to soil resources. The Proposed Action would contribute to the cumulative modification of soil resources from the previously listed Forest activities in the general area.

There could be cumulative effects associated with the implementation of Alternative 1. Although there would be no direct effects, indirect effects to soil resources are likely due to continued soil erosion and off-site transport during intense runoff events. Therefore, cumulative effects to soil resources may include continued soil erosion and off-site transport that could result in a loss of soil productivity in eroded areas over time.

No negative cumulative effects to soil resources are anticipated to occur if Alternative 2 is chosen for implementation. Erosion and runoff controls have been included in project design criteria, BMPs, and Watershed Conservation Practices (WCPs) to minimize negative impacts to soil resources. Furthermore, all other activities occurring on Federal lands must also adhere to any applicable BMPs and WCPs. Proposed actions are designed to reduce current

soil erosion and off site transport and therefore would improve soil stability at the site as well as overall water quality in the Middle Loup River.

Region 2 Sensitive Species and Wildlife

The proposed action is consistent with applicable Forest Plan goals, direction, and standards. The proposed activities would have no impact on all Region 2 sensitive species except the yellow-billed cuckoo and the loggerhead shrike. Impacts may occur to individual species but would not reduce the viability of these two species. (US Forest Service 2012. Biological Assessment and Evaluation Reports) The proposed action complies with applicable conservation strategies for wildlife species and is consistent with the Endangered Species Act, the National Forest Management Act, and other laws providing direction and requirements for the management of wildlife species and habitat.

Management indicator species (MIS) for the project area include the Plains sharp-tailed grouse and the Greater prairie chicken. No effect to these species populations or habitat will occur under the proposed alternatives due to a lack of MIS habitat in the project area.

Threatened and Endangered Species

Section 7 of the Endangered Species Act (ESA) directs federal agencies to ensure that actions authorized, funded, or carried out by them are not likely to jeopardize the continued existence of any threatened or endangered species or result in the destruction or adverse modification of their critical habitat. The proposed action is consistent with ESA.

American Burying Beetle (ABB)

Portions of the Bessey administration area would be considered potential habitat for ABB. Impacts could occur to individual ABB during any ground disturbance activities. Even though clearance protocols were conducted with negative capture results, caution will be used with the assumption that an incidental or discountable effect to ABB could occur by ground disturbing activities. Because of this possibility, although unlikely to occur, a *"may affect, not likely to adversely affect"* determination is made.

The remaining Federal listed species have been analyzed for presence and effects. A determination of "*no effect*" has been made for each species and rationale is provided in the Biological Assessment found in the project record.

AGENCIES AND PERSONS CONSULTED

Natural Resources Conservation Service, electronic soil survey information (USDA NRCS, 1999)
Thomas County Commissioners
Corp of Engineers
Robert Harms, U.S. Fish and Wildlife Service; Nebraska Ecological Services Field Office
Nebraska State Historic Preservation Office
Cheyenne River Sioux Tribe

REFERENCES

Allen, Doug. 2012. Nebraska Department of Health and Human Services, Division of Public Health. Personal communication regarding municipal water supplies in Halsey, Nebraska and at the Bessey Administrative site. January 10, 2012.

Bleed and Flowerday, 1989. An Atlas of the Sand Hills. 1st ed. Conservation and Survey Division Institute of Agriculture and Natural Resources University of Nebraska-Lincoln

Carter, U.S. President Jimmy. 1977a. Executive Order 11988 - Floodplain Management. Available online: http://www.epa.gov/owow/wetlands/regs/eo11988.html.

Carter, U.S. President Jimmy. 1977b. Executive Order 11990 - Protection of Wetlands. Available online: http://www.epa.gov/owow/wetlands/regs/eo11990.html

Doran, J.W. and Parkin, T.B. 1994. Defining and Assessing Soil Quality" in J. W. Doran et al (Ed.) Defining Soil Quality for a Sustainable Environment. SSSA Spec. Pub. 35. SSSA, Madison, WI. p 25-37.

Electronic Code of Federal Regulations. Title 10: Energy. Part 433-Energy Efficiency Standards for New Federal Commercial and Multi-Family High-Rise Residential Buildings.

Elliott-Smith, Elise and Susan M. Haig. 2004. Piping Plover (Charadrius melodus), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/002

Federal Emergency Management Agency (FEMA), 2012. National Flood Insurance Program, Flood Maps and associated data. Available online at: http://www.fema.gov/hazard/map/flood.shtm

Federal Register. Executive Order 13514 of October 5, 2009. Issued by President Barack Obama.

Hicks, Keri. Jan. 2005. An Intensive Cultural Resources Inventory of the Bessey Office, Bessey Ranger District, Nebraska National Forest, Thomas County, Nebraska.

Lewis, James C. 1995. Whooping Crane (Grus americana), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/153

Nebraska Department of Environmental Quality (DEQ), 2010. The 2010 Water Quality Integrated Report. Available online at: http://www.deq.state.ne.us/

Nebraska Department of Environmental Quality (DEQ), 2010. State of Nebraska assigned Beneficial Use Designations. The 2010 Water Quality Integrated Report. http://www.deq.state.ne.us/

Nebraska Department of Environmental Quality (DEQ), 2010. State of Nebraska Water Quality Parameters for Beneficial Uses. The 2010 Water Quality Integrated Report. http://www.deq.state.ne.us/

Nebraska Dept. of Environmental Quality. Nebraska-State Implementation Plan (SIP) Summaries and Federally Approved Regulations. Title 129. Oct. 28, 2011.

Nebraska Department of Natural Resources NDEQ, 2011 Available online at: http://dnrdata.dnr.ne.gov/wellscs/Menu.aspx

Nebraska National Forest. Land and Resource Management Plan 2001 Revision. Chap. 3. March 10, 2009.

Running, S.W. 2006. Is Global Warming Causing More, Larger Wildfires? Science. 18 August 2006. Vol 313:927-928.

Thompson, Bruce C., Jerome A. Jackson, Joannna Burger, Laura A. Hill, Eileen M. Kirsch and Jonathan L. Atwood. 1997. Least Tern (Sternula antillarum), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/290

US Army Corps of Engineers, 1987. Corps of Engineers Wetlands Delineation Manual. Wetlands Research Program Technical Report Y-87-1. Environmental Laboratory, Waterways Experiment Station. Vicksburg, MS. 143 p.

USDA Forest Service. 2001. Land and Resource Management Plan. Nebraska National Forest and Associated Units. District Files. Available: http://fsweb.nebraska.r2.fs.fed.us/staffs/plan/lrmp/index.shtml [10/07/09].

USDA Forest Service. 2002. Land and Resource Management Plan Record of Decision. Nebraska National Forest and Associated Units. District Files.

USDA Forest Service. 1996. Memo 2500/2600 (July 29, 1996) NEPA Guidance for Watershed from Jim Maxwell, Water Program Team Leader to Region 2 Director of Planning and Budget and Region 2 Watershed Staff.

USDA Forest Service. 2004. Western Forests, Fire Risk, and Climate Change. Science Update, Issue 6. US Department of Agriculture, Forest Service, Pacific Northwest Research Station. Portland, Oregan. January 2004. Available: http://www.fs.fed.us/pnw.

USDA Forest Service. 2006. Forest Service Handbook, Region 2 Supplement, 2509.25 – Watershed Conservation Practices Handbook. Rocky Mountain Region, Ft. Collins, Colorado. 58 p.

USDA Forest Service. 2009a. Revised Land and Resource Management Plan for the Nebraska National Forest. Chadron, NE: Nebraska National Forest, United States Department of Agriculture - Forest Service.

USDA Forest Service. 2009b. Forest Soil Disturbance Monitoring Protocol, Volume I:Rapid Assessment and Volume II: Supplementary Methods, Statistics, and Data Collection. Deborah S. Page-Dumroese, Ann M. Abbott and Thomas M Rice. General Technical Report GTR-WO-82. 135p.

USDA Forest Service Direction. Climate Change Considerations in Project Level NEPA Analysis. [Online]. January 13, 2009.

USDA Forest Service. National Roadmap for Responding to Climate Change. FS-957b. February, 2011.

USDA Natural Resources Conservation Service (NRCS) Agricultural Handbook 436, USDA, SCS. 1999. Soil Data Mart, Geospatial data for Soil Survey Area NE171 - Thomas County, Nebraska. [Online] Available at: http://soildatamart.nrcs.usda.gov/. Accessed January 09, 2012

USDA Natural Resources Conservation Service (NRCS). 2009. National Hydrography Dataset, Nebraska. National Cartography and Geospatial Center, Fort Worth, TX. [Online] Available at: http://nhd.usgs.gov/data.html. Accessed May 19, 2010.

USDA Soil Conservation Service (SCS). 1961. Soil Survey of Thomas County, Nebraska. US Department of Agriculture.

USDA Soil Conservation Service (SCS). 1993. Soil Survey of Blaine County, Nebraska. US Department of Agriculture. 1-5 p.

USDI Fish and Wildlife Service (FWS). 1995. National Wetlands Inventory. Digital and supporting data available online: http://www.fws.gov/wetlands/.

USDI Fish & Wildlife Service. Blowout Penstemon. IPaC - Information, Planning, and Conservation System. Last updated October 18, 2011. http://ecos.fws.gov/ipac/wizard/speciesInformation!showSpeciesInformation.action?spcode=Q2EX

USDI Fish & Wildlife Service. IPaC - Information, Planning, and Conservation System. Last updated October 18, 2011. http://ecos.fws.gov/ipac/wizard/speciesInformation!showSpeciesInformation.action?spcode=Q2YD

USDI Fish & Wildlife Service. 1991. American burying beetle (*Nicrophorus americanus*) recovery plan. Newton Corner, MA, USA.

USDI Fish & Wildlife Service. 1993. Recovery Plan for the Pallid Sturgeon (*scaphirhyncus albus*

USDI Geological Survey (USGS). 1995. Science in Your Watershed: General Introduction and Hydrologic Definitions. HTML version of Manual of Hydrology: Part 1. General Surface-Water Techniques by W.B. Langein and K.T. Iseri, Water Supply Paper 1541-A, "Methods and practices of the Geological Survey". [Online] Available at: http://water.usgs.gov/wsc/glossary.html#INTRODUCTION

USDI Geological Survey (USGS). 2012. National Water Information System (NWIS). Streamflow statistics for selected stations on Middle Loup River, Nebraska. [Online] Available at: http://waterdata.usgs.gov/ne/nwis. Accessed January 12, 2012.

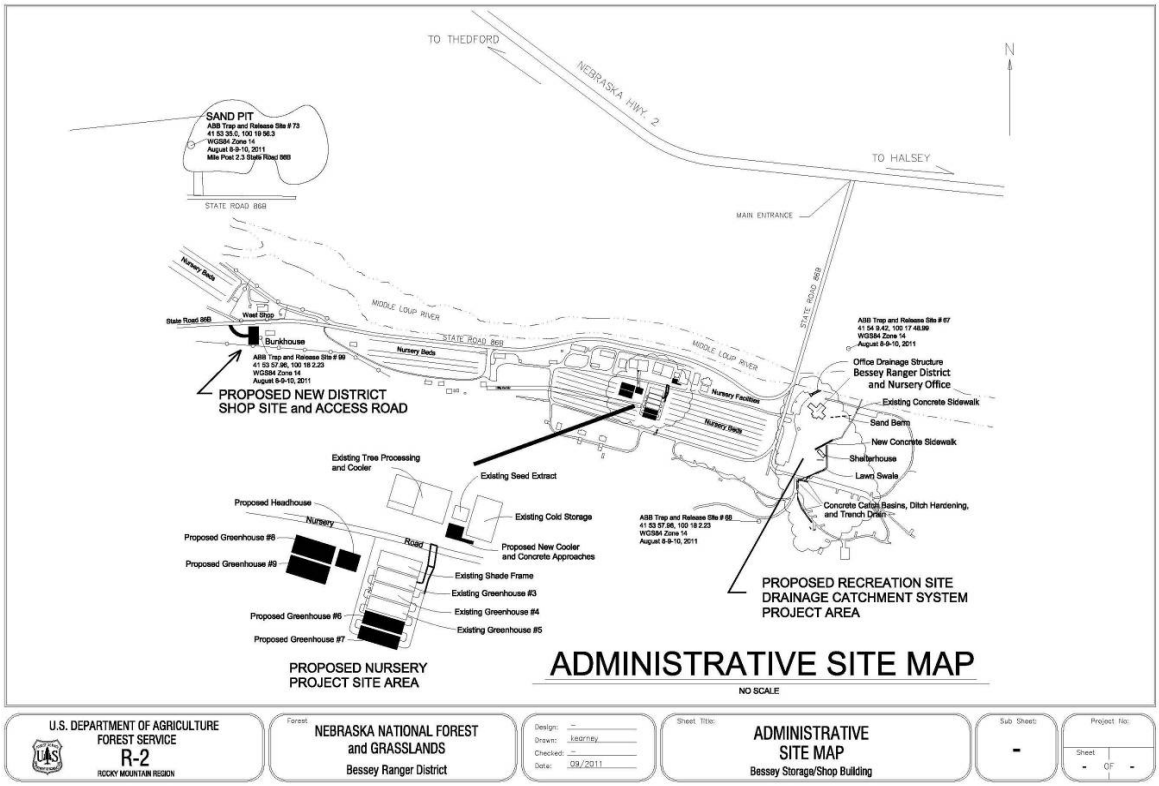
US Environmental Protection Agency (EPA). 2009. What is a Watershed? [Online] Available at: http://water.epa.gov/type/watersheds/whatis.cfm

US Environmental Protection Agency (EPA). 2011a. Our Waters. [Online] Available at: http://water.epa.gov/type/

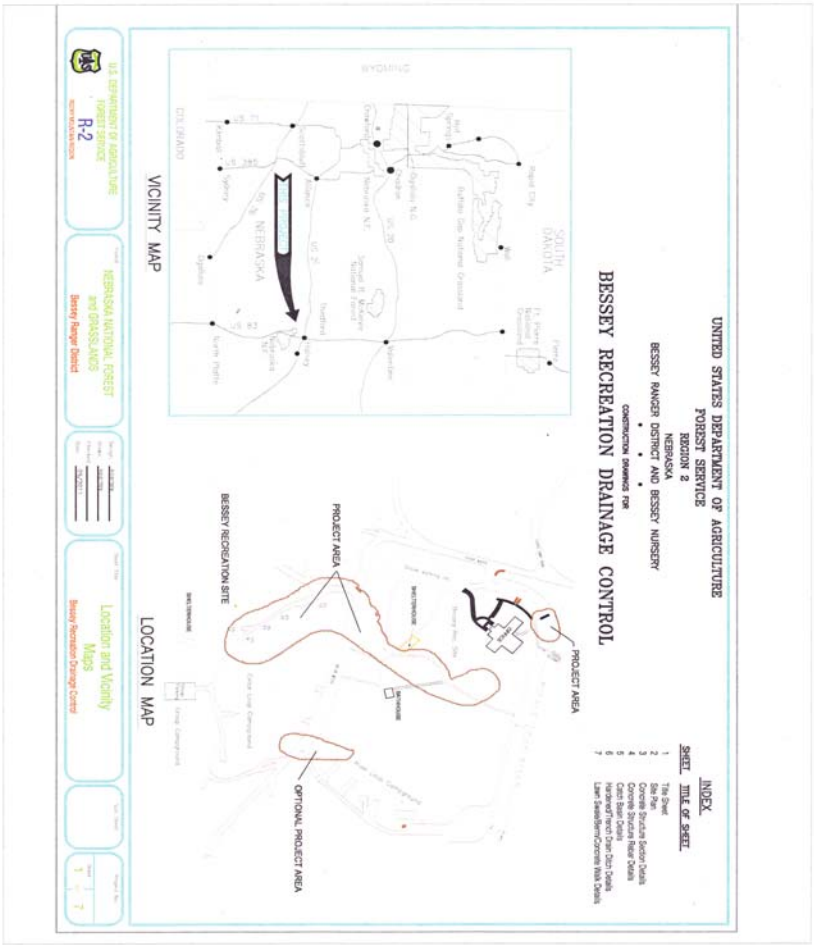
US Environmental Protection Agency (EPA). 2011b. National Pollutant Discharge Elimination System. Clean Water Act. Available [Online] Available at: http://www.epa.gov/lawsregs/laws/cwa.html.

Westerling, A.L., Hidalgo, H.G., Cayan, D.R., and Swetnam, T.W. 2006. Warming and Earlier Spring Increases Western U.S. Forest Wildfire Activity. Sciencexpress. 6 July 2006. Available at: www.sciencexpress.org

APPENDIX A
ADMINISTRATIVE SITE PLAN

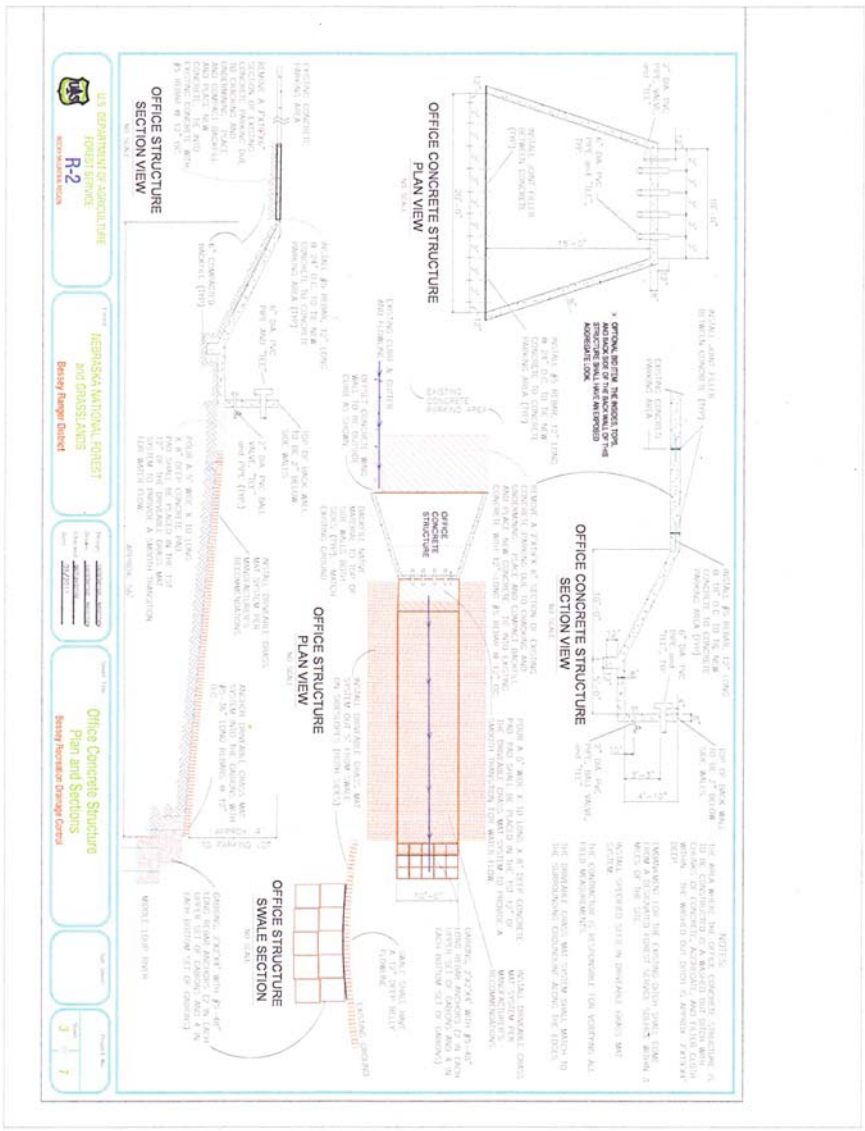


Appendix B

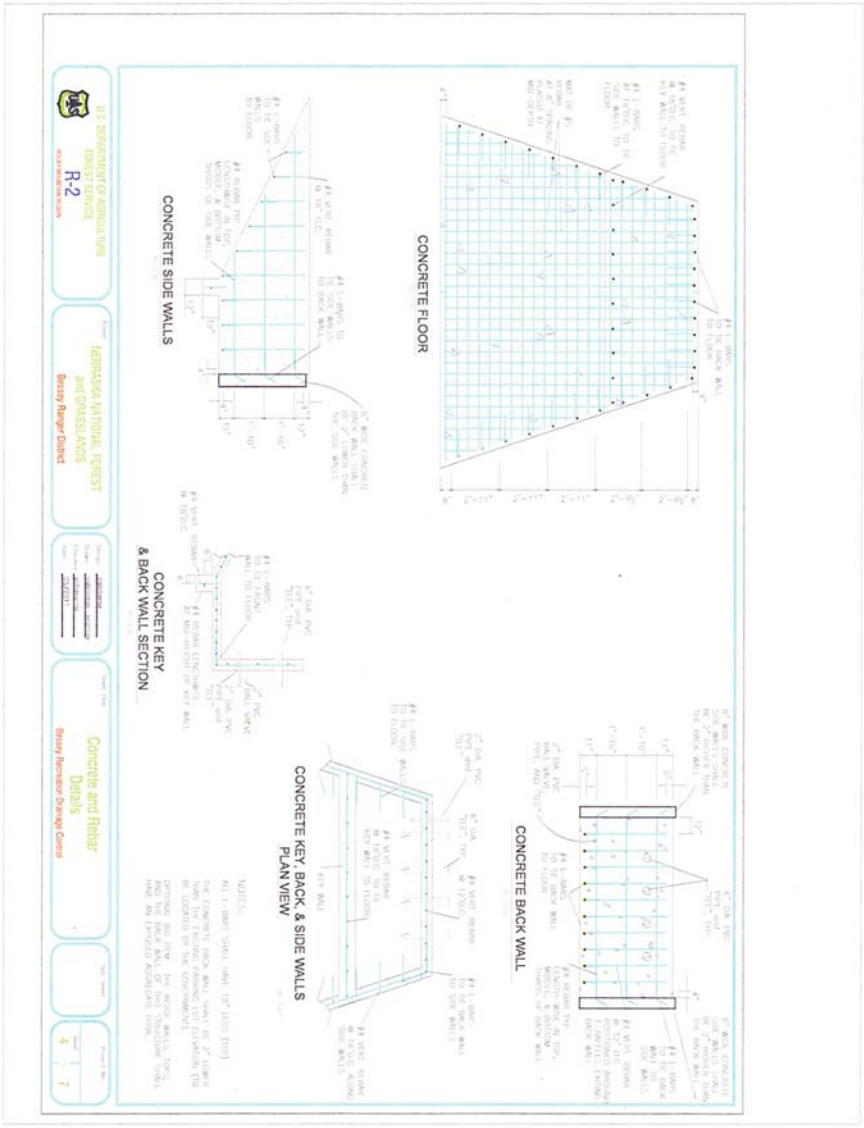


APPENDIX B - Sheet 1 of 7

APPENDIX B – Sheet 2 of 7

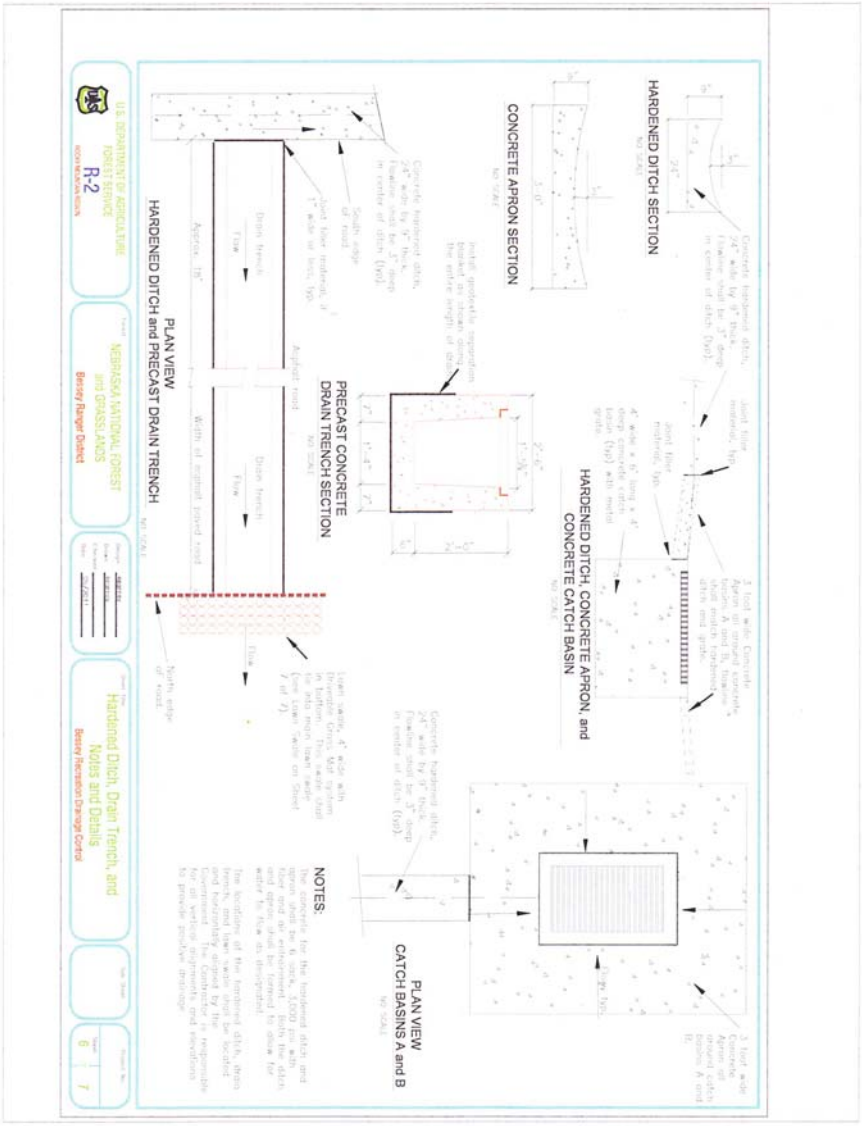


APPENDIX B – Sheet 3 of 7



APPENDIX B – Sheet 4 of 7

APPENDIX B – Sheet 5 of 7



APPENDIX B – Sheet 6 of 7

APPENDIX B – Sheet 7 of 7

Appendix C

RESPONSE TO COMMENTS

There were eight respondents to the Bessey Complex Drainage/Warehouse/Greenhouse Construction. Of the eight responses, four responded by overland mail and four responded via internet email. This appendix contains those comments received and the Forest Service response to the issues raised and questions asked. The individuals and organizations responding are as follows:

1. Glenn Helm, P.E. of the Federal Aviation Administration (FAA)
2. Willam L. Vodehnal of the Nebraska Game and Parks Commission-District II
3. Margaret Anquoe of the Cheyenne and Arapaho Tribes of Oklahoma
4. Dan Nitzel of the Nebraska Off Highway Vehicle Association (NOHVA)
5. Mike Murphy of the Middle Niobrara Natural Resources District (MNNRD)
6. Mack Deveraux
7. Terry Riley, PhD
8. Jim Ducey
9. Conrad Fisher, Northern Cheyenne Tribe (Arrived 12/12/2011)

DEGREE OF PUBLIC SCOPING

A legal notice informing the public of the proposals and soliciting public comment was published in "*The Omaha World-Herald*" at Omaha and "*The North Platte Telegraph*" at North Platte on Sept. 27, 2011. A scoping notification letter was also mailed to 154 individuals, local, State and Government officials and agencies, tribal leaders and governments, professional organizations, environmental groups and media outlets, on Sept. 29, 2011. The comment period ended on Oct. 27, 2011. Two letters were returned as non-deliverable. A "No Interest" response form was received from the Northern Cheyenne Tribe at Lame Deer, Montana on Dec. 12.

PUBLIC REVIEW COMMENTS AND FOREST SERVICE RESPONSES

The eight written comments were analyzed by grouping them into the following subjects:

Against Project (Alternative 1): General comments against the proposed projects.

Project Support (Alternative 2): General comments in support of the proposed projects.

Request for Additional Information: Request for additional information.

Airspace Considerations: One comment on FAA airspace review.

The following are the substantive comments; organized by subject with the corresponding Forest Service response where warranted. The number in parenthesis at the end of the comment refers to the number assigned to the commenter as shown above. (Example; (1) = Glenn Helm)

Against Project (Alternative 1)

"I am in support of Alternative 1, No Action. You have failed to acknowledge the effect of this project on the financial state of the United States of America in your list of issues. This entire proposal is a "want" as opposed to a "need." It may not be a great expense as compared to the money squandered in other ways, but when are you going to recognize that a bankrupt nation that use(d) to be the leader of the free world is an issue?

Inefficiencies only seem to bother federal agencies, including the Forest Service, when they want to do away with something, like the swimming pool or the old shop. It doesn't seem to matter at all that the grazing fees have caused that activity to lose money since its inception. Oh, I know that you can blame congress, but the fact remains you haven't the will to even mention it out loud.

It also seems very odd to me that you can only park one pickup in the existing shop. Have pickups gotten bigger? Have your drivers gotten worse? I was District Ranger on the BRD from August, 1982 to December 1997, and we parked two pickups in the west end and one in the east end the entire time. I don't recall any conflicts with nursery operations either.

People in this country are growing very weary of struggling along and being told to share in the sacrifice while the federal government just keeps spending on luxuries with wild abandon. Wake up and smell the coffee. Be part of the solution instead of adding to the problem." **(6)**

Forest Service Response

Inclusion in this analysis of the financial state of the United States government as a whole and the determination of whether the United States is still a leader in the free

world is beyond the scope of our proposed action. The monetary value of grazing fees is also beyond the scope of this analysis. In order to operate within our dwindling budget, we made the decision in 2009 to reduce our presence at the Samuel R. McKelvie Forest and moved a lot of the equipment and materials normally housed at the McKelvie administrative site to the Bessey Ranger Station. We have also replaced our older, smaller, archaic equipment with newer, efficient and technically superior equipment. Modern fire engines, skidsteers, brushhogs, ATVs, UTVs plus attachment have been purchased since 1997 to increase efficiency, reduce labor and maintain a healthier forest. The cumulative effect of these efficiencies has tasked our storage capability to the maximum. We currently do not have the ability to store all this equipment out of the weather. Continued outdoor storage reduces longevity and continued operability thereby depleting budgets for maintenance and will result in early replacement and additional cost. The new warehouse will provide ample space to protect this public property.

"My view is that the project proposed for new Bessey division facilities should not be done. If your agency cannot take care of what it now has properly, any available resources should be allocated to achieve a goal of properly management grass and trees. I point specifically to range management at McKelvie. During a drive through there recently I noted growth of invasive and unwanted cedar trees in the horse pasture near the campground. There were invasive cedars in the campground area. There were invasive cedars at the Hand Exclosure several years ago which I suspect have not been dealt with and are probably continuing to degrade the quality of this tract, and especially ruining the wetland. There are other expanses with unwanted cedars at McKelvie, and certainly at Bessey, I suspect.

Also the draft management plan is languishing and staff time should be spent dealing with this rather than trying to get new buildings. The preferred alternative should be no action. Manage the forest to help it achieve its optimum. The land should be improved before any facilities. The land is much more important yet is obviously being ignored. If the forest service would change (charge) a reasonable grazing fee for cattle, the funds could be put to use improving the range lands by removing invasive cedars, etc." **(8)**

Forest Service Response

The Bessey Ranger District maintains an active land management program including thinning and burning to reduce the cedar infringement on the meadow areas and the forested sections. From 2002-2006, approximately 5,000 acres of land in a variety of allotment units were thinned with the removal of cedar as the primary species. Cedar was also removed from 295 acres in the Camp 5 South Allotment from 2007-2009. Another 614 acres were treated under the Coyote Thinning Project in 2010 under a service contract. The North Strip Allotment is currently being thinned of cedar with approximately 300 acres treated upon completion. The district has also burned 3,600 acres over the last three years to control cedar encroachment. This is a total of

approximately 9,800 acres of cedar reduction management that has taken place over the last nine years. The equipment used by district crews to perform this work is part of what will be housed in the warehouse proposed for construction. It is important to store this equipment out of the harsh Nebraska elements in a structure where they can be maintained and also increase their longevity.

There has not been as active a program at McKelvie as there has been on the Bessey side of the district. We plan to begin the planning and analysis in 2013 to increase our land management activities at McKelvie. This will include a prescribed fire and fuels reduction program to address cedar infringements. This future planning will include public scoping and compliance with the National Environmental Protection Act (NEPA). The public will have an opportunity to provide their input on what areas and methods of treatment they would like to see performed.

Project Support (Alternative 2)

"On October 12, I visited the Bessey District and viewed the sites for the proposed actions. It is my opinion that each of the 4 actions will have a minimum impact on wildlife resources, upgrade aging shop conditions, improve the functionality of the nursery and address erosion issues due to excessive rain runoff." **(2)**

Forest Service Response

Thank you for your comment

"We support Alternative 2. I have visited the existing west shop many times since 1990 and our organization supports improvements that would assist with operation of the Bessey Ranger District recreation complex, trail maintenance, and fire support readiness. The existing District Shop is small and is in need of updating to provide better support for newer technologies and equipment. I would not be surprised if maintenance of the existing structures and bringing them up to modern standards would cost as much a(s) constructing a new facility. A new building would be much more energy efficient." **(4)**

Forest Service Response

Thank you for your comment

"We support improvements to drainage in the Bessey Recreation Complex and Nursery facilities. All of the improvements described in Alternative 2 would have a positive impact on public health and safety. I can see no impact on cultural resources from Alternative 2 as the improvements will occur in areas that have already been

evaluated for prior projects. The area where the new facilities would be located under Alternative 2 would have no impact on wildlife, but may enable improvements to wildlife elsewhere. The Alternative 2 improvements will have a positive effect to recreation by ensuring proper drainage in the Bessey Recreation Complex and providing better support facilities for recreation related projects and trails. Under Alternative 2, the new facilities can use newer technologies to reduce energy use and with lower maintenance costs, provide for a more sustainable facility." **(4)**

Forest Service Response

Thank you for your comment. We have determined that this project is an "undertaking," as defined in 36 Code of Federal Regulations (CFR) 800.16(y) and formal consultation in accordance with Section 106 of the Historic Preservation Act was conducted with the Nebraska State Historic Preservation Office (SHPO) and the Cheyenne River Sioux Tribe. A cultural resources surface survey covering the entire project area was done in 2003 and SHPO concurred on March 21, 2005 that these projects will have "no adverse effects on the historic properties."

"The improvements that you are proposing to make at Bessey Nursery should be accomplished as soon as possible. You have Middle Niobrara NRD support on this project." **(5)**

Forest Service Response

The drainage work, construction of the warehouse and the concrete approach slabs near the existing Nursery packing shed are scheduled to begin this spring if Alternative 2 is selected and documented in a decision notice. Construction of Greenhouse 1 and 2 will be between 2012-2014 and the Headhouse and large greenhouse between 2014-2016.

"I support Alternative two—to construct a new District shop, appurtenances, and new access road, construct a new Nursery cooler and approach slab, construct a Recreation Site Drainage Catchment System, and construct a new Headhouse and four Greenhouse structures." **(7)**

Forest Service Response

Thank you for your comment

Request for Additional Information

"Before we can offer any comments, we would (like) to review the archaeological report as well as the ecological and wildlife reports. Thank you." **(3)**

Forest Service Response

A copy of the cultural resource inventory that was completed in 2005 and a copy of the ecological/wildlife Biological Assessment were emailed to Ms. Anquoe on Nov. 21, 2011 by the acting forest archaeologist. Any comments submitted by the tribe after review of the provided documents will be accepted.

"Where was the announcement for the proposed building project provided on the forest service website for the Nebraska National Forest?" **(8)**

Forest Service Response

The Nebraska National Forest lists its projects on the Nebraska National Forest and Grasslands *world-wide web internet site. Under "Land and Resources Management" there is a Quick Link on the right for "Schedule of Proposed Actions." If you click on this and then click on "Click to view the current SOPA Report," you will open a table listing the on-going projects by ranger district. Each listing gives a brief description and location of a project and the level of environmental analysis that is expected. This project is included on that list.*

Airspace Considerations

"Airspace Considerations
The project may require formal notice and review for airspace review under Federal Aviation Regulation (FAR) Part 77, Objects Affecting Navigable Airspace. To determine if you need to file with FAA, go to http: oeaaa.faa.gov and click on the 'Notice Criteria Tool' found at the left-hand side of the page.

If you determine that filing with FAA is required, I recommend a 120-day notification to accommodate the review process and issue our determination letter. Proposals may be filed at http://oeaaa.faa.gov." (1)

Forest Service Response

When we attempted to access the above web site, we received the following message, "The OE/AAA system is currently offline, we are sorry for the inconvenience. If you have any questions please contact the Support Desk at

oeaaa_helpdesk@cghtech.com." *The height of the proposed warehouse should not exceed 50-feet, which is shorter than the surrounding tree height. Therefore, it is our determination that there will be no airspace infringement with this building and an FAA review will not be necessary.*