

Finding of No Significant Impact

Ozark National Scenic Riverways

Housing Replacement

Environmental Assessment

INTRODUCTION

In compliance with the National Environmental Policy Act (NEPA), the National Park Service (NPS) has prepared an Environmental Assessment (EA) for a housing replacement project at Ozark National Scenic Riverways (OZAR). The EA documents the potential environmental impacts associated with the proposed action. This Finding of No Significant Impact (FONSI) describes the alternative the NPS selected for implementation, provides the rationale for its selection, and explains why it will not have significant impacts on the human environment. A non-impairment determination is also included in Attachment A.

The enabling legislation states that OZAR was established in 1964 for “the purpose of conserving and interpreting unique scenic and other natural values and objects of historic interest.” The purpose of the park is further explained in the 2015 General Management Plan and 2016 Foundation Document as follows: (1) preserve and protect in an unimpaired condition the unique scenic and natural values, processes, and unspoiled setting derived from the clean, free-flowing Current and Jacks Fork Rivers, springs, caves, and their karst origins, (2) provide for and promote opportunities for the scientific and public understanding of the natural and cultural resources, (3) offer opportunities for understanding and appreciating the human experience associated with the Ozark Highlands landscape, and (4) provide for uses and enjoyment of outdoor recreation opportunities consistent with the preservation of the park unit’s resources.

PURPOSE AND NEED

The purpose of this project is to replace housing at Big Spring #473, Alley Spring #523, Alley Spring #508, and Round Spring (#236, 237, and 238). Chlordane (a common pesticide no longer in use) was used 30 years ago to eradicate termites at these housing sites, and this has led to health and safety issues with the buildings. The buildings at Big Spring #473 and Alley Spring #508 were demolished in 2016—Alley Spring #523 still remains for ranger use as day-time office space only, but will be demolished and replaced with housing in the future. In addition to issues resulting from chlordane, there were also building deficiencies, such as a lack of ADA compliance and substandard utilities that needed to be remedied. The three housing units at Round Spring have not been impacted by chlordane but need upgrades to increase bedroom capacity and accessibility. The project is needed to provide essential housing for seasonal and permanent park staff in areas central to the locations they serve. These employees provide a variety of services, including protection of facilities and resources, visitor safety, and interpretation.

ALTERNATIVES CONSIDERED

Selected Alternative

The selected alternative is Alternative B. Alternative B will best address the purpose and need for staff housing, and is the most environmentally sound and economical solution. New park housing will be constructed in the general vicinity of previous housing at the following sites: Big Spring #473, Alley Spring #508, Alley Spring #523, and Round Spring (three units). The construction activities are

anticipated to take approximately four months to complete, and because these are previously disturbed sites, adverse impacts to park resources will be minimal. Upon completion, Alternative B will ensure the park has adequate housing for staff to function as stewards of park resources.

No Action Alternative

Under Alternative A—No Action, no substantial housing improvements would be implemented. No new housing would be constructed to provide essential living spaces for seasonal and permanent park staff in areas central to the locations they serve. In 2016, substandard housing structures were demolished and the sites restored to natural conditions except for the Alley Spring #523 site. Demolition of this structure has been postponed for the indefinite future, as it is currently being used by ranger staff as a day-time office space. Under Alternative A, no new structures would be developed to replace these housing at these sites.

Other Alternatives Considered

Several U.S. Forest Service locations in and around Winona and a location near the spray field at Big Spring were evaluated by the planning team. However, none of these sites were considered feasible alternatives to meet the purpose and need for taking action.

SIGNIFICANCE CRITERIA REVIEW

Potential impacts resulting from implementing the selected alternative were evaluated using the ten significance criteria listed in 40 CFR 1508.27, as follows:

(1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that, on balance, the effect will be beneficial.

New housing will be constructed in the general vicinity of the demolished housing. The new construction may not be in the exact footprints of the previously removed housing, but will be within the previously disturbed area of development. Since an archeological survey has only been conducted for the Big Spring #473 site, no determination of effect (under NHPA Section 106) for all four sites can be made at this time. Prior to implementing any undertaking or recommendation that has an effect on archeological resources, a determination will be made according to the protocols of the Programmatic Agreement.

At all four locations soils have been disturbed in the past by housing, a driveway, parking, and utility construction. However, some native soils onsite will be disturbed by new construction due to cut, fill, and compaction. Project mitigation measures and best management practices will be implemented to reduce soil erosion and sedimentation at the sites. Impacts to soils could be localized and adverse in the short-term but the implementation of mitigation measures will provide beneficial impacts to soils in the long-term by stabilizing the sites.

Potential impacts to the three special status bat species by tree removal or general construction noise and activity will be mitigated by implementation of USFWS strategies to protect them. Tree clearing will only be performed between November 1 and April 1 to avoid impacts to Indiana bats and northern long-eared bats. Project mitigation measures and best management practices identified in Section 2.4 of the EA will be implemented to reduce or eliminate erosion and potential sedimentation in nearby water courses—this will greatly reduce potential for impacts to Ozark Hellbenders (a federally endangered aquatic salamander) and other stream resources.

New housing construction and associated site restoration activities are anticipated to take about four months, and could have adverse short-term impacts on viewsheds enjoyed by the public. Vegetation removal, disturbed soils, and typical construction activity could all impact the viewshed. Specific site locations, scale, materials, and color palette are all important factors that will be considered in the site design and construction process to minimize these potential adverse impacts to viewsheds.

Since activities at the Big Spring #473 and Alley Spring #508 sites include replacement of existing structures and the impacts are on small tributaries, the potential impact to floodplain values is minimal to none. The sites have been previously disturbed from prior uses, all of the utilities are already present, the sites are outside of the historic districts, and they are removed from high visitor use areas.

New housing, including access drives, will be constructed in the general vicinity of the demolished structures. New housing construction and site restoration activities are anticipated to take about four months. An erosion and sediment control plan utilizing BMPs (best management practices) will be implemented during construction to reduce soil erosion and sediment transport into nearby water courses. Implementation of this plan will reduce the impacts to water quality to minimal or less.

Consideration of both adverse and beneficial effects of the selected action, as described above, does not result in the potential for significant impacts.

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

The selected alternative will not cause adverse impacts to public health or safety. In particular, at the Alley Spring #508 site, which is shown to be located in the "Potential Flash Flood Zone" in the 1981 Development Concept Plan, new housing will be placed high above Alley Branch. Therefore, no significant effects related to public health and safety will result from the selected action.

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

There will be no impacts to prime or unique farmlands, scenic rivers, or ecologically critical areas. The potential exists for adverse impacts to archeological resources; however, prior to implementation of any undertaking with the potential to impact archeological resources, a determination will be made in accordance with the protocols of the Programmatic Agreement. Therefore, no significant effects will occur related to the unique characteristics of the geographic area.

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

There were no highly controversial effects on the quality of the human environment identified during either the preparation of the EA or the public review period. Therefore, consideration of the degree to which the effects on the quality of the human environment are likely to be highly controversial does not result in potential for significant effects.

(5) The degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks.

No highly uncertain effects were identified during the planning for this project, and no effects associated with the selected alternative involve unique or unknown risks.

(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 selected alternative does not establish a precedent for future actions with significant effects, nor does it represent decisions about future considerations. The purpose of this action is to identify appropriate locations for the development of new park housing.

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

Cumulative impacts were determined by combining the impacts of the selected alternative with other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. The incremental contribution of the selected action will not create significant cumulative impacts.

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

For the purposes of satisfying the requirements of Section 106 of the National Historic Preservation Act (54 U.S.C. 306108) for the Ozark National Scenic Riverways Housing Replacement Environmental Assessment, no determination of effect is being made at this time. The NPS will utilize the Nationwide Programmatic Agreement of 2008 (PA) between the NPS, Advisory Council on Historic Preservation (ACHP), and the National Conference of State Historic Preservation Officers (NCSHPO). This agreement provides established protocols for the individual consideration of an undertaking following either a streamlined or standard review pathway. Prior to implementation of any undertaking or recommendation that has an effect on historic properties, undertakings presented within the Ozark National Scenic Riverways Housing Replacement Environmental Assessment will be added to the NPS Planning, Environment and Public Comment (PEPC) database and reviewed by the Regional CRM team. A determination will be made on the treatment of the undertakings according to the protocols of the PA. Compliance with the PA and processes described above ensure that no significant impacts on scientific, cultural, or historical resources will result from the selected action.

(9) The degree to which the action may adversely affect an endangered or threatened species or its critical habitat.

The park consulted with the U.S. Fish and Wildlife Service (FWS) for compliance with Section 7 of the Endangered Species Act (16 U.S.C. 1531 et seq.) on June 27, 2016, to evaluate the potential impacts of the project on threatened or endangered species and their habitat.

Potential impacts to three special status bat species by tree removal or general construction noise and activity will be mitigated by implementation of USFWS strategies to protect them. Tree clearing will only be performed between November 1 and April 1 to avoid impacts to Indiana bats and northern long-eared bats. Further, project mitigation measures and best management practices identified in the EA will be implemented to reduce or eliminate erosion and potential sedimentation in nearby water courses, which will greatly reduce potential for impacts to the Ozark Hellbender.

The park determined that construction of new housing will affect, but not adversely affect, listed species. On May 25, 2017, the FWS concurred with the NPS determination. Therefore, implementing the mitigation measures summarized above ensure that no significant effects on endangered or threatened species will result from the selected action.

(10) Whether the action threatens a violation of Federal, State, or local environmental protection law.

The selected alternative violates no Federal, State, or local laws, including environmental protection laws; therefore, no significant effects related to other laws would result from the selected action.

PUBLIC INVOLVEMENT

The environmental assessment was made available for public review and comment from April 19, 2017 to May 22, 2017. Announcement of the review opportunity was made through a park press release, and copies were available on the PEPC website and at Park Headquarters. Hard copies of the EA also were sent individually to potentially interested agencies and affiliated Tribes. During the review period for this proposed plan, two pieces of correspondence were received from the public related to energy-efficient construction and flood protection. Neither comment necessitated changes to the document.

FINDING OF NO SIGNIFICANT IMPACT

Based on a review of the facts and analysis contained in the EA, the NPS has selected the action alternative (Alternative B) for housing replacement at the park. The selected alternative will not have a significant impact either by itself or in consideration of cumulative impacts. Accordingly, the requirements of the NEPA, regulations promulgated by the Council on Environmental Quality, regulations promulgated by the Department of the Interior, and provisions of Director's Order 12 and the 2015 National Park Service NEPA Handbook have been fulfilled.

It is my determination that the selected alternative does not constitute a major federal action significantly affecting the quality of the human environment. Therefore, in accordance with the National Environmental Policy Act of 1969 and the Council on Environmental Quality regulations, an environmental impact statement is not required and will not be prepared for implementation of the selected alternative.

Recommended: Laurena E. Johnson
Superintendent, Ozark National Scenic Riverways

8/17/17
Date

Approved: C. H. Shelby
Regional Director

8/29/17
Date

[Handwritten signature]

APPENDIX 1 – NON-IMPAIRMENT DETERMINATION OZARK NATIONAL SCENIC RIVERWAYS HOUSING REPLACEMENT

National Park Service's *Management Policies 2006* require analysis of potential effects to determine whether or not actions would impair park resources. The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. National Park Service managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adversely impacting park resources and values.

However, the laws do give the National Park Service the management discretion to allow adverse impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values. Impairment is an impact that, in the professional judgment of the responsible National Park Service manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources and values. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, or
- Key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or
- Identified in the park's general management plan or other relevant NPS planning documents as being of significance.

An impact would be less likely to constitute impairment if it is an unavoidable result of an action necessary to pursue or restore the integrity of park resources or values and it cannot be further mitigated.

Impairment findings relate directly to park resources and values. The NPS Organic Act does not consider visitor use and experience, socioeconomics, public health and safety, environmental justice, land use, or operations to be resources or values; therefore, those topics can be dismissed from impairment review. Based on the aforementioned guidelines, a determination of non-impairment has been prepared for the preferred alternative described in Chapter 2 of this EA. An impairment determination has been prepared for the following impact topics: archeological resources, soils, threatened and endangered species, viewsheds, floodplains, and water quality.

ARCHEOLOGICAL RESOURCES

Archeological surveys for these sites are limited at this time. An archeological survey for the Big Spring #473 site was conducted by the Midwest Archeological Center of the NPS in August of 2016. In-house NPS archeological surveys were conducted prior to house demolition projects at the Big Spring #473, Alley Spring #508, and Round Spring sites in 2016. No surveys for new housing construction sites have been conducted for sites other than at Big Spring. The park will implement the servicewide Section 106 Programmatic Agreement, which provides established protocols for the individual consideration of an

undertaking (i.e., housing construction) following either a streamlined or standard review pathway, prior to actual construction.

For the purposes of satisfying the requirements of Section 106 of the National Historic Preservation Act (54 U.S.C. 306108) for the Ozark National Scenic Riverways Housing Replacement Environmental Assessment, no determination of effect is being made at this time. The National Park Service (NPS) will utilize the Nationwide Programmatic Agreement of 2008 (PA) between the NPS, Advisory Council on Historic Preservation (ACHP) and the National Conference of State Historic Preservation Officers (NCSHPO) which provides established protocols for the individual consideration of an undertaking following either a streamlined or standard review pathway. Prior to implementation of any undertaking or recommendation that has an effect on historic properties presented within the Ozark National Scenic Riverways Housing Replacement Environmental Assessment these undertakings will be added to the NPS Planning, Environment and Public Comment (PEPC) database and reviewed by the Regional CRM team. A determination will be made on the treatment of the undertakings according to the protocols of the PA. For the purposes of the Ozark National Scenic Riverways Housing Replacement Environmental Assessment, the Section 106 process as defined in 36 CFR 800 is satisfied by this process.

Under the selected alternative, new housing would be constructed in the general vicinity of the demolished housing. The new construction may not be in the exact footprints as the previously removed housing but would be within the previously disturbed area of development. Since an archeological survey has only been conducted for the Big Spring #473 site, no determination of effect for all four sites can be made at this time. Prior to implementation of any undertaking or recommendation that has an effect on archeological resources, a determination will be made on the treatment of the undertaking according to the protocols of the Programmatic Agreement. Because the selected alternative will be implemented in previously disturbed areas and will comply with the requirements of the PA, there would be no impairment of archeological resources.

SOILS

Using the Natural Resource Conservation Service (NRCS) Websoil Survey database, specific soils for the four housing areas were determined (NRCS 2016):

Big Spring #473 Housing: Soils at the site are defined as “Tilk-Secesh complex, 1 to 3 percent slopes, occasionally flooded.” These soils are a gravelly loam and well drained. This site has been disturbed by past housing development, including an access drive, parking, and underground utilities. The site is flat.

Alley Spring #523 Housing: This location principally includes two soil types. The “Rueter-Gepp complex, bench, 8 to 15 percent slopes” is located on the western half of the site near the lagoons. These soils are a gravelly silt loam and excessively drained. The “Gladden silt loam, 0 to 3 percent slopes, occasionally flooded”, on the eastern area below the bench adjacent County Road 106-423, are well drained soils. The existing parking and house are on top of the bench, which slopes abruptly to east with an elevation drop of approximately 15 feet.

Alley Spring #508 Housing: This location principally includes two soil types. The “Coulstone-Alred complex, 15 to 50 percent slopes, very stony” is located on the western higher portion of the site. These

soils consist of slightly decomposed plant material covering a very gravelly sandy loam. They are found on steep slopes, are excessively drained, and never flood. "Relfe gravelly sandy loam, 1 to 3 percent slopes, rarely flooded" is found in the eastern lower portion of the site. These soils are found on flat slopes, excessively drained, and in areas that rarely flood. These soils are in the area that includes the access drive to the site, the Alley Spring and Mill parking area, and Alley Branch. Topography on this site is undulating, except at the existing and proposed house sites where it is relatively flat.

Round Spring Housing: This location principally includes two soil types. The "Reuter-Gepp complex, 8 to 15 percent slopes, stony" located on the southern part of the site, is on ridges, excessively drained, and never flood. The "Relfe-Sandbur complex, 0 to 2 percent slopes, frequently flooded" is found on the northern portion, adjacent Spring Valley Creek. These soils are located in floodplains, are excessively drained, and subject to frequent flooding. The site is relatively flat in the location of the three housing units proposed for renovations, and then rises abruptly to the existing duplex that is proposed for demolition.

Under the selected alternative, new housing would be constructed in the general vicinity of the demolished structures. At all four locations soils at the sites have been disturbed in the past by housing, driveway, parking, and utility construction. However, some native soils onsite would be disturbed by new construction due to cut, fill and compaction. Project mitigation measures and best management practices (described in Chapter 2 of the EA) would be implemented to reduce soil erosion and sedimentation at the sites. Impacts to soils would be localized and adverse in the short-term, but the implementation of mitigation measures would provide beneficial impacts to soils in the long-term by stabilizing the sites. Therefore, implementation of the selected action will not result in impairment to soils.

THREATENED AND ENDANGERED SPECIES

Federally listed species were identified through discussions with park staff, informal consultation with the U.S. Fish and Wildlife, and the Missouri Department of Conservation Natural Heritage Database. Consultation was initiated with the U.S. Fish and Wildlife Service on June 27, 2016. A list of federal threatened, endangered, and special concern species that are known to occur or may occur within or adjacent to the project area was requested. Based on the USFWS email response, the USFWS IPaC (Information for Planning and Conservation) system was used to identify threatened, endangered, or special concern species that *may occur or could potentially be affected* at the four housing locations.

Ozark Hellbender (*Cryptobranchus alleganiensis bishopi*) (Endangered)

Gray Bat (*Myotis grisescens*) (Endangered)

Indiana Bat (*Myotis sodalis*) (Endangered)

Northern Long-eared Bat (*Myotis septentrionalis*) (Threatened)

Red-cockaded Woodpecker (*Picoides borealis*) (Endangered) (Not listed for Big Spring site)

Virginia Sneezeweed (*Helenium virginicum*) (Threatened) (Not listed for Big Spring site)

Under the selected alternative, new housing would be constructed in the general vicinity of demolished structures. Potential impacts to the three special status bat species by tree removal or general construction noise and activity would be mitigated by implementation of USFWS strategies to protect them. Tree

clearing would only be performed between November 1 and April 1 to avoid impacts to Indiana bats and northern long-eared bats. Project mitigation measures and best management practices identified in Chapter 2 of the EA would be implemented to reduce or eliminate erosion and potential sedimentation of nearby water courses, which would greatly reduce any potential for impacts to Ozark Hellbenders or other stream life. On May 25, 2017 the USFWS concurred with our determination that the selected action may affect, but would not adversely affect the species listed. With the implementation of these strategies and mitigation measures as part of the selected alternative, there will be no impairment of threatened and endangered species.

VIEWSHEDS

NPS Management Policies 2006 states the park's scenery and scenic features are included among the resources and values that are to be protected and conserved. The proposed action calls for the removal of obsolete employee housing and the construction of new employee housing. The Big Spring #473 site is hidden from public view and actions at that site would not impact the viewshed. The Alley Spring #523 site is adjacent County Road 106-423 and near Missouri Highway 106, in the vicinity of the maintenance yard and sewage lagoons. Construction at this site would be visible from these roadways. The Alley Spring #523 site is immediately west of the Alley Spring Mill and Alley Spring on the boundary of the Alley Spring Historic District and the Alley Spring Natural Area. Construction at this site would be visible to visitors accessing the Historic District. The Round Spring site is an open lawn area adjacent Missouri Highway 19. Activities at that site include removal of an older housing structure, modifications to the three existing housing units and reconfiguration of sidewalks and parking areas. This construction would be visible to visitors traveling on Highway 19.

Specific site locations, scale, materials, and color palette are all important factors that would be considered in the site design and construction process to minimize adverse impacts to viewsheds. By implementing these mitigation measures, impacts on the viewshed would be short-term, limited to the time period of construction activities. As a result, potential adverse impacts would not result in impairment of the park's viewsheds.

FLOODPLAINS

Floodplains and associated riparian areas are the most diverse, dynamic, and complex terrestrial environments in the park. This is due in part to the high frequency of flooding, which is an important force in shaping the physical and biological features of the park. Flooding also represents a hazard, and past flooding in the park has damaged park infrastructure and threatened the lives of visitors. The Current and Jacks Fork Rivers typically rise six to ten feet above the average low-water mark during the rainy season, from March to May. These rivers can be expected to rise 19 feet once every 10 years and over 30 feet during a 100-year flood event. Because many of the park's popular recreation areas and facilities are in flat, low-lying areas, this large increase in river height during flood events places many of these facilities and high use areas in the floodplain risk zone. The frequency of flooding and the rapid rise that occurs during flash flood events have prompted the park to relocate certain facilities and establish closures based on river levels.

The selected alternative proposes two sites that are in the 100-year floodplain, Big Spring #473 and Alley Spring #508. Justification for this action is detailed in the Floodplain Statement of Finding prepared under Director's Order 77-2. Any new housing would be raised from the base elevation. This would provide the necessary protection to the property and its occupants from future flooding events. Housing development and related infrastructure will not result in adverse impacts to the floodplain natural processes. Therefore, the selected action will not result in impairment of floodplains.

WATER QUALITY

The Jacks Fork and Current Rivers within the Ozark National Scenic Riverways are designated as Outstanding National Resource Waters because of their exceptional water quality. This designation has national, recreational, and ecological significance. Both rivers are also classified as Tier Three Waters by the State of Missouri. These stringent federal and state standards are designed to protect against any degradation in the water quality of these rivers. Also, both these rivers are on the Nationwide River Inventory under the Wild and Scenic Rivers Act. The park's water resources are of exceptional quality; however, they are also highly susceptible to pollution. This is because karst terrain does not allow for effective filtration and absorption of pollutants from surface water as it travels into the groundwater system. Also, faster travel rates provide less time for bacteria and viruses to die. Polluted water that may have been on the surface yesterday could be in the groundwater system today and then discharged into the rivers from one of the major springs within a week. In fact, groundwater can travel up to three miles per day in the Current River watershed.

Under the selected alternative, new housing, including access drives, would be constructed in the same general area as the demolished structures. New housing construction and site restoration activities are anticipated to take about four months. An erosion and sediment control plan utilizing BMPs would be implemented during construction to reduce soil erosion and sediment transport into nearby water courses. Implementation of this plan would reduce the adverse impacts to water quality to minimal or less. Therefore, implementation of the selected alternative will not result in impairment to water quality.