ENVIRONMENTAL ASSESSMENT SUMMARY AND FINDING OF NO SIGNIFICANT IMPACT FOR NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION INTEGRATED WATER RESOURCES SCIENCE AND SERVICES NATIONAL WATER CENTER

ENVIRONMENTAL ASSESSMENT SUMMARY

Purpose and Need

The purpose of the Integrated Water Resources Science and Services (IWRSS) National Water Center (NWC) facility is to provide the nation with a seamless suite of consistent information for water resources monitoring and forecasting. This consistency would be achieved by improving the overall quality of the information and providing new information products and services to further support the needs of water resource stakeholders. The stakeholders include federal, state and local entities, including the University of Alabama (UA), for which the facility would benefit both public and university research priorities on University property.

The need for an IWRSS NWC arises from an unmet capacity, cited by federal, state and local water resource managers and decision-makers, to obtain more refined and integrated information that will enhance their ability to reliably respond to immediate and long-term planning uncertainties, such as natural disasters, climate change, and increasing demand on limited water resources.

At this time, no single facility is available to address the program requirements identified for an IWRSS NWC (Gould Evans Associates *et al.*, 2010). In response, the National Oceanic and Atmospheric Administration (NOAA) is providing leadership for an IWRSS consortium. The overarching IWRSS goals and functionality include dedicated data processing capacity, interpersonal collaboration, and briefings and warnings using an integrated, multi-agency data set. The IWRSS consortium would be supported by an operations and service center, or National Water Center, which would be developed to improve coordination and communication for potential flooding situations and to deliver enhanced flood services. An evaluation of program needs that are required to support the envisioned IWRSS NWC indicates a staffing requirement of nearly 200 and a facility of at least approximately 58,000 gross square feet. The established program will enable the IWRSS to meet its objective of improved water resources information from which to predict, plan for, and address water-related needs and vulnerabilities.

Proposed Action

The proposed action would provide a single facility for housing components of the National Weather Service (NWS) and its Office of Hydrologic Development (OHD), and establish capabilities to synthesize information technology across the IWRSS consortium. To implement the IWRSS strategy, the formation of a national water services and support facility, or national water center, is proposed to provide a platform for the integration of research and technology and to serve as a proving ground to test new capabilities before delivery to regional and national operations.

To accommodate the various components of the IWRSS NWC, the NWS has initiated a facility programming effort to identify the space requirements for staff, equipment, information technology (IT), communication and coordination facilities, and associated parking and design requirements. As a result of the programming effort that NWS, OHD, and UA planners and staff have conducted, a proposed facility has been identified to support 196 individuals with approximately 58,000 gross square feet. On-site services, adjacency of facilities, and IT requirements have been estimated, as have the requirements for additional parking, utilities, and service loading access.

Alternatives Considered

Preferred Site Alternative

The Preferred Site Alternative for the proposed action is on Hackberry Lane, northeast of Shelby Hall on the UA campus in Tuscaloosa, Alabama. Under this alternative the proposed IWRSS NWC (facility) would be constructed on a 3.7-acre parcel that is currently occupied by the UA Environmental Health and Safety (EHS) building. The subject site is available for lease to NOAA and would require site preparation activities, including utility abandonment or relocation, and demolition of existing structures by UA. The proposed facility design and facility construction, as proposed by NOAA, would be consistent with UA Master Plan design and Leadership in Energy and Environmental Design (LEED) silver design certification standards and guidelines. NOAA would own and operate the proposed facility. Data processing to support IWRSS operations would be augmented by the use of computers and equipment in existing facilities at Gordon Palmer Hall located approximately 2,200 feet south of the preferred IWRSS site. No physical construction or demolition is proposed at Gordon Palmer Hall. The facility will house IWRSS-compatible computer process equipment within existing spaces currently suited for such equipment.

The proposed IWRSS NWC structure would be a two-story, 58,000 gross square foot building with a partial basement containing an operations center (OC). The building footprint on the site would be approximately 24,000 square feet, with a 10,000-square-foot basement area below grade. Parking for the proposed facility would be accommodated by a combination of 40 paved, on-site stalls to the east of the NWC building and to the south of the existing chiller units, and approximately 140 off-site parking stalls on the UA campus. The off-site parking is planned by UA on an undeveloped, graded parcel across the Bryce Hospital access road, opposite the adjacent chiller units (refer to Figure 1). UA is seeking funding to construct a parking structure on this property; otherwise, surface parking could be installed on the southern portions of that same location to accommodate the IWRSS NWC off-site parking requirement.

Vehicle access to the Preferred Site Alternative is proposed from the existing Bryce access road along the northern boundary of the site (in a similar location to the existing site access), and from the east via the former Bryce Hospital property. UA recently acquired the former Bryce Hospital property; however, UA possession of the property will not occur until May 2013. Site access would also include a drop off area on Hackberry Lane for vehicles and busses.

No Action Alternative

The No Action Alternative assumes that the proposed NOAA action to construct and operate an IWRSS NWC would not occur and that existing operations at the preferred or alternative sites considered would continue or be available for alternative uses planned by others. Under this scenario, the Preferred Site Alternative would not be available to NOAA and the UA may continue operation of its EHS building at that location. Or, at the discretion of University planners, demolition of the EHS building may or may not occur under the No Action Alternative. Existing overhead power lines would be re-routed under the No Action Alternative; however, underground utilities are expected to remain for the foreseeable future. Under this scenario, use of the former Bryce Hospital property to accommodate access to the subject site would not be required in advance of May 2013, when the University formally acquires control of that adjacent property. Existing environmental conditions would remain unchanged; however, funding authorized by Congress would remain unspent for this purpose and establishment of an IWRSS NWC by NOAA would be delayed indefinitely. The use of the existing disparate methods for water resource data coordination and forecasting nationally would be unchanged.

Alternatives Considered and Rejected

Except for a No Action Alternative, no other feasible alternatives to the proposed action and the preferred site were identified by NOAA. A purely virtual configuration or IT framework for effective coordination among the interagency consortium would not meet the full suite of IWRSS goals and functionality, including a dedicated data processing capacity, interpersonal collaboration, and briefings and warnings using an integrated, multi-agency data set.
The NWS has been authorized funding to establish a physical facility at the UA campus in Tuscaloosa, Alabama. Initially three locations within the campus were presented by UA planners to the NWS. Because of the severe limitations in site size and access, two of these locations were deemed inadequate for the purpose and need for the proposed action and excluded from further consideration by NOAA.

Environmental Impacts and Mitigation Measures

NOAA prepared an EA analyzing the proposed action in conformance with procedural requirements of the National Environmental Policy Act of 1969 (NEPA). The document adheres to requirements of NOAA Administrative Order 216-6, Environmental Review Procedures for Implementing the National Environmental Policy Act (amended May 20, 1999).

Based on an evaluation of the proposed action's effect on the human environment, it was determined that no significant impacts would result. The EA analyzed the following issue areas:

- Land Use
- Geological Resources
- Air Quality
- Water Resources
- Agricultural Resources
- Hazardous Materials
- Recreational Resources
- Cultural Resources
- Flora and Fauna
- Wetlands
- Floodplains
- Socioeconomics
- Noise
- Transportation
- Utilities and Solid Waste
- Visual and Aesthetic Resources
- Cumulative Impacts

No significant unavoidable adverse impacts to any resource area were identified under the No Action Alternative, and no mitigation measures were recommended. The following is a summary of anticipated impacts and suggested mitigation measures for each resource area under the Preferred Site Alternative:

Resource	Anticipated Impacts	Suggested Mitigation
Land Use	Negligible impacts	None
Geological Resources	Seismic impacts – low Other geological resources – no impacts	None
Air Quality	Construction – minor Ongoing operation - minor	During clearing, grading, earth moving, excavation, or transportation of cut or fill material, water trucks or sprinkler systems are to be used to prevent fugitive dust from leaving the site. During construction, water trucks or sprinkler systems shall be used to keep all affected areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this would include wetting down such areas in the later morning, after work is completed for the day, and whenever wind speed exceeds 15 miles per hour. Soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation.
Water Resources	Negligible impacts	The proposed action would include implementation of best management practices, such as silt fences, for the prevention of sediment release during excavation and construction, and the release of fuels from construction equipment or during IWRSS NWC operations. Specifically, secondary containment structures may be used to contain spills related to equipment or refueling operations. Specific measures minimally required for the National Pollutant Discharge Elimination System permit are recommended (see Section 6.4.3)
Recreational Resources	No impacts	None
Cultural Resources	Potential adverse impact	The following mitigation measures for the Preferred Site Alternative would reduce potential adverse effects to cultural resources to a less than significant level. • Create an accurate and to-scale map on acid-free archival bond paper for the entire Bryce NRHP district as depicted in AHC Site 1TU808 • Cite locations of approximately 20 remaining buildings within the district and associated with Bryce Hospital. A recent aerial photograph will be used as a base map for spatial accuracy and location relative to existing features. • Indicate the date or era of construction, i.e. the

Resource	Anticipated Impacts	Suggested Mitigation
		original hospital in the 1850s through the final construction period of the 1940s – 1950s. It is understood that the precise date of construction for smaller structures at Bryce Hospital are not well documented and may not be readily available for inclusion in this effort. • Prepare one (1) archival quality black and white photograph of each remaining building's front elevation and key to the map. When possible, multiple buildings may be captured on the same photograph to assist depiction of the historic district's spatial relationships, historic context, and visual narrative. • Prepare one (1) archival quality photograph of the front elevation of the Men's Tuberculosis Building along with two (2) archival quality photographs representing the interior of the Men's Tuberculosis Building (EHS Building). • Ensure photographs are large-format, 8" x 10", and are accompanied by contact-style prints produced from scanned TIFF images of the negatives. Copies of the negatives will not be required. • Submit up to three (3) printed copies (one unbound) of the map and photographs, as described herein, on 8 1/2 x 11 inch pages and deliver to the AHC.
Flora and Fauna	No impacts	None
Wetlands	No impacts	None
Floodplains	No impacts	None
Agricultural Resources	No impacts	None
Noise	Construction – negligible impacts Ongoing operation – minor positive impact	Limit the use of large construction equipment and earthmoving activity to the hours of 6 am to 9 pm daily.
Transportation	Construction – no impacts Ongoing operation – minor	An alternative access route for IWRSS NWC staff should be established with campus police and emergency response organizations. Should access from the former Bryce Hospital roadway system not become available to serve the proposed IWRSS NWC, an alternative access will be required from the existing campus roadway and former Bryce Hospital access road immediately to the north.
Utilities and Solid Waste	Minor	None
Visual and Aesthetic Resources	Negligible impacts	None

Resource	Anticipated Impacts	Suggested Mitigation
Hazardous Materials	Construction – potentially significant Ongoing operation – less than significant	That NOAA ensure that the lease agreement with the university includes conditions requiring that the existing building on site be closed and demolished in accordance with all applicable federal, State and local laws pertaining to hazardous materials handling, storage, transportation and disposal, including (but not limited to) relevant laws pertaining to asbestos and lead-based paint, and that test results for swipes taken from surfaces within the EHS building following decommissioning are provided to NOAA for review. That NOAA investigate the presence of contamination in groundwater at the site, prior to commencing site disturbing activities, in accordance with the recommendations of the Phase I ESA drafted for the Preferred Site Alternative in November 2010 and finalized in January 2011. That all relevant federal, state and local laws pertaining to hazardous waste handling, storage, transportation and disposal, discharge of stormwater and dewatering water, and worker health and safety are complied with during construction of the proposed IWRSS NWC. That all relevant federal, state and local laws pertaining to storage of hazardous substances are complied with, with respect to the ongoing use and maintenance of the fuel tank for the proposed emergency generator.
Socioeconomics and Environmental Justice	Negligible impacts	None
Cumulative Impacts	Transportation – minor Other resources – negligible	None

FINDING OF NO SIGNIFICANT IMPACT

The Council on Environmental Quality (CEQ) Regulations state that the determination of significance using an analysis of effects requires examination of both context and intensity, and lists ten criteria for intensity (40 CFR 1508.27). In addition, NOAA Administrative Order (NAO) 216-6, Section 6.01(b) 1 – 11, provides eleven criteria, the same ten as the CEQ Regulations and one additional for determining whether the impacts of a proposed action are significant. Each criterion is discussed below with respect to the proposed action and considered individually as well as in combination with the others.

1. Can the proposed action reasonably be expected to cause both beneficial and adverse impacts that overall may result in a significant effect, even if the effect will be beneficial?

No. The EA analyzes the proposed action at a preferred site alternative and the no-action alternative. No other viable alternatives were considered. The EA describes the proposed action and environmental settings, and analyzes associated environmental consequences based on

established standards and criteria. Analyses for each of the following topics and resource areas were undertaken: Land Use, Geological Resources, Air Quality, Water Resources, Recreational Resources, Cultural Resources, Flora and Fauna, Essential Fish Habitat, Wetlands and Navigable Waters, Floodplains, Coastal Zone Management, Agricultural Resources, Noise, Transportation, Utilities and Solid Waste, Visual and Aesthetic Resources, Hazardous Materials, Socioeconomics, and Cumulative Impacts.

The EA characterizes each environmental impact and cites mitigation measures to reduce anticipated impacts to a less-than-significant level. A summary of mitigation measures is provided within each document and is repeated in this FONSI document.

2. Can the proposed action reasonably be expected to significantly affect public health or safety?

No. Public health and safety effects are not expected to be significant. Any construction activities have the potential to adversely affect public health and safety (e.g., noise and dust) and worker health and safety (e.g., hazardous materials); however, in this case these effects are not anticipated to be significant if the mitigation measures recommended in the EA are implemented.

3. Can the proposed action reasonably be expected to result in significant impacts to 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?

No. The Alabama Historical Commission (AHC) has determined that the UA Environmental Health and Safety Building is eligible to the National Register of Historic Places (NRHP) for its association with the form Bryce Hospital complex and that removal of the structure in order to construct the proposed National Water Center would be an adverse impact. The AHC has also determined that photo-documentation of local structures associated with the former Bryce Hospital Complex, as previously indicated, would mitigate this impact to a less than significant level. The AHC has determined that the project would not affect archaeological resources or have a direct or indirect impact to other structures either eligible for or listed to the NRHP.

The preferred site alternative is not in proximity to park lands, prime farmlands or wild and scenic rivers. The project area is not within and/or does not contain any environmentally sensitive habitats or other ecologically critical areas.

4. Are the proposed action's effects on the quality of the human environment likely to be highly controversial?

No. The proposed action involves lease of a site for use as an Integrated Water Resources Science and Services (IWRSS) National Water Center (NWC). The site would be developed to meet the requirements of the IWRSS NWC.

This EA analyzes the effects of proposed action on the human environment. A draft of this document was circulated and made available for review and comment by interested members of the public and government agencies. NOAA accepted comments on the draft during an formal 30-day public comment period beginning February 2, 2011, and ending March 5, 2011. No highly controversial topics were raised during the comment period.

5. Are the proposed action's effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

No. The anticipated effects of the proposed action on the human environment are evaluated the EA based on conceptual plans and worst-case conditions. There is a low level of uncertainty in these anticipated effects because final design details have not been prepared. However, while effects may occur, mitigation measures were recommended that would eliminate the potential for highly uncertain effects and unique or unknown risks.

6. Can the proposed action reasonably be expected to establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration?

No. The project consists of a stand-alone facility that is limited in scope and extent. It would neither be a catalyst or precedent for other future actions by NOAA or others that would result in significant effects, nor would it influence a future action under consideration.

7. Is the proposed action related to other actions that when considered together will have individually insignificant but cumulatively significant impacts?

No. The proposed action is not reliant upon or connected to other actions, nor is it relied upon for the occurrence of other actions. For each of the subject areas analyzed in the EA, the contribution of the proposed project to a cumulatively significant impact is not considerable, provided the recommended mitigation measures are implemented. Therefore, the proposed action will not result in a significant cumulative impact to the human environment.

8. Can the proposed action reasonably be expected to 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 historical resources?

No. The Alabama Historical Commission (AHC) has determined that the UA Environmental Health and Safety Building is eligible to the National Register of Historic Places (NRHP) for its association with the form Bryce Hospital complex and that removal of the structure in order to construct the proposed National Water Center would be an adverse impact. The AHC has also determined that photo-documentation of local structures associated with the former Bryce Hospital Complex, as specified above, would mitigate this impact to a less than significant level. The AHC has determined that the project would not affect archaeological resources or have a direct or indirect impact to other structures either eligible for or listed on the NRHP.

9. Can the proposed action reasonably be expected to have a significant impact on endangered or threatened species, or their critical habitat as defined under the Endangered Species Act of 1973?

No. No habitats exist on or near the subject site that would support transient or resident uses, including breeding, by any federally listed endangered or threatened species.

10. Can the proposed action reasonably be expected to threaten a violation of Federal, state, or local law or requirements imposed for environmental protection?

The effect of the proposed action on the human environment has been analyzed relative to applicable Federal, state and local environmental laws or regulations. No regulatory violations or other significant environmental effects are expected to result provided that mitigation measures recommended in the EA are implemented.

11. Can the proposed action reasonably be expected to result in the introduction or spread of a non-indigenous species?

No. No transport, release, propagation or spread of non-indigenous species is associated with the proposed action.

DETERMINATION

In view of the information presented in this document and the analysis contained in the supporting Environmental Assessment prepared for the National Oceanic and Atmospheric Administration Integrated Water Resources Science and Services National Water Center, it is hereby determined that the undertaking of the proposed action will not significantly impact the quality of the human environment. In addition, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an environmental impact statement for this action is not necessary.

William Broglie
NOAA Chief Administrative Officer

9/9/2011
Date