



UNITED STATES DEPARTMENT OF COMMERCE
National Institute of Standards and Technology
Gaithersburg, Maryland 20899

February 28, 2024

MEMORANDUM FOR THE RECORD

From: Mark Liao
NEPA Coordinator

Subject: Categorical Exclusion

Project Title: Subproject 2 – Saltwater Delivery System to the Coastal
Conservation Research Laboratory

Location: Florida International University, Biscayne Bay Campus
Marine Sciences Building
3000 NE 151 Street, Building N13,
North Miami, FL 33181

The National Environmental Policy Act (NEPA) and associated implementing regulations (40 CFR Parts 1500-1508) require that all major actions by federal agencies be reviewed with respect to the environmental consequences on the human environment. The National Institute of Standards and Technology (NIST) is providing a congressionally directed funding grant for Subproject 2 – Saltwater Delivery System to the Coastal Conservation Research Laboratory. Consequently, NEPA and the associated implementing regulations apply to this project.

This memorandum summarizes the determination that Subproject 2 – Saltwater Delivery System to the Coastal Conservation Research Laboratory has been found to be categorically excluded from further environmental review under NEPA.

Description of the Action

The Coastal Conservation and Research Laboratory is a 28,827 square foot facility comprised of two laboratory buildings (3,872, and 1,366 sq. ft.), an outdoor research tank facility (6,203 sq. ft.) and a newly created Motion Capture Tank Facility (1,180 sq. ft.). The

intent of this project is to augment the existing facility by bringing in high quality salt water that is needed to test the efficacy of sensors, robots and autonomous vehicles. Producing high quality salt water will require purchase and installation of the following equipment:

(Dirty Water System)

1. (1) centrifugal variable speed pump for water circulation and/or well water pumping
2. (2) sand filters with glass filter media
3. (2) activated carbon filters
4. (1) ozone generator, (1) air compressor supply, and (1) contact tank
5. (1) acid pump
6. (1) blower and accessories (i.e. inlet/outlet plumbing, airstones, tubing, etc.)

(Clean Water System)

1. (2) centrifugal variable speed pumps for water circulation and sending water to research facilities
2. (1) sand filters with glass filter media
3. (1) activated carbon filter
4. (1) water chiller
5. (1) blower and accessories (i.e. inlet/outlet plumbing, airstones, tubing, etc.)
6. (1) pH pump & tank/drum with mixing

(Control System)

1. Water level monitoring in storage tanks
2. Valves and controls to regulate well pump and distribute water as necessary within the 'dirty water' system for treatment and transfer of treated 'dirty water' to the 'clean water' system.

This equipment will be installed outdoors at the Coastal Conservation and Research Laboratory or in an existing storage shed.

This project will be accomplished in accordance with all applicable state and federal environmental and safety regulations. All applicable regulatory permitting will be obtained.

Specific Considerations of this Action and any Extraordinary Circumstances

- Air Emissions, Water Resources, Critical Habitats

No significant impacts to air, water resources or critical habitats are expected.

Groundwater will be pumped from an existing permitted well into the facility treatment system. Water within the facility system is typically recycled; however, periodically a percentage of the water within the facility system is released to an existing cistern and the sanitary sewer.

- **Building Staffing/Utilities**

Staffing at the Coastal Conservation Research Laboratory is not expected to increase significantly. Water consumption and electricity use are not expected to change significantly over current building use.

- **Greenhouse Gas Emissions**

The equipment installation and operation planned are not expected to significantly impact energy use or greenhouse gas emissions.

- **Flooding Potential and Resilience**

The equipment installation and operation planned will have no impact to the flooding potential or flood resilience of this building.

- **Hazardous Materials**

Hazardous building materials are not expected to be encountered in this project. Any hazardous materials (i.e., asbestos, lead based paint, polychlorinated biphenyls) that may be disturbed in the equipment installation will be handled and disposed in accordance with State and Federal regulations.

- **Historic/Cultural Significance**

The equipment installation and operation planned is not considered to have any historic or cultural impacts on the project site or vicinity.

- **Environmental Justice**

This project is not anticipated to have any disproportional adverse human health or environmental impacts to overburdened and underserved communities, including minority, Tribal, or low-income populations.

Effects of the Action

No significant adverse impacts on the environment are expected from this action.

Categorical Exclusion

The activities associated with this project fall within the criteria of the following Department of Commerce Categorical Exclusion:

A-1 Minor renovations and additions to buildings, roads, airfields, grounds, equipment, and other facilities that do not result in a change in the functional use of the real property (e.g. realigning interior spaces of an existing building, adding a small storage shed to an existing building, retrofitting for energy conservation, or installing a small antenna on an already existing antenna tower that does not cause the total height to exceed 200 feet and where the FCC would not require an environmental assessment or environmental impact statement for the installation). This CE does not apply in instances where the project must be submitted to the National Capital Planning Commission (NCPC) for review and NCPC determines that it does not have an applicable Categorical Exclusion.

This project is considered a minor addition of equipment to a building that does not change functional use of the real property. The project does not require review by the NCPC.

The proposed activity: Subproject 2 – Saltwater Delivery System to the Coastal Conservation Research Laboratory is categorically excluded from the need for further environmental review under NEPA. Any changes to the above project will require additional NEPA review.

Mark Liao
NIST NEPA Coordinator

Date

R.C. Vaughn
NIST Chief Facilities Management Officer

Date