NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)

NOTICE: 08WFF-01

National Environmental Policy Act; Wallops Research Park adjacent to NASA Goddard Space Flight Center's Wallops Flight Facility

AGENCY: National Aeronautics and Space Administration (NASA)

ACTION: Finding of No Significant Impact

SUMMARY: Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. 4321, *et seq.*); the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500-1508); NASA policy and procedures (14 CFR Part 1216, Subpart 1216.3); NASA has made a Finding of No Significant Impact (FONSI) with respect to the development of the Wallops Research Park (WRP) in Accomack County, Virginia. The proposed project would consist of a multi-use development dedicated to non-retail commercial and government space and science research, educational facilities, and public recreational areas.

ADDRESS: Copies of the final EA may be viewed at the following location:

http://sites.wff.nasa.gov/code250/docs/WRP_FEA.pdf

A limited number of copies of the final EA are available by contacting:

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SUPPLEMENTAL INFORMATION: NASA has reviewed the Environmental Assessment (EA) prepared for the development of the WRP and has concluded that the EA represents an accurate and adequate analysis of the scope and level of associated environmental impacts. NASA hereby incorporates the EA by reference in the FONSI. NASA solicited public and agency review and comment on the environmental impacts of the proposed action through:

- 1. A notice of availability of the draft EA published in the Eastern Shore News and the Chincoteague Beacon on April 16, 2008;
- 2. Publication of the draft EA on the WFF Environmental Office website;
- 3. Consultations with local, state, and federal agencies; and
- 4. Direct mailing of the draft EA to interested parties.

Comments received were taken into consideration in the final EA.

The EA has been prepared to describe the potential impacts from the Proposed Action, one alternative (collectively, the "action alternatives"), and the No Action Alternative. The actions covered by this EA have been assessed to ensure that they do not result in any new or substantial environmental or safety concerns.

The Proposed Action consists of developing a research park adjacent to the WFF Main Base on approximately 82 hectares (ha) (202 acres) of land owned by NASA, Accomack County, and the Marine Science Consortium (MSC). The WRP would consist of a multi-use development dedicated to space and science research, educational facilities, and recreational areas. Proposed land use categories within WRP include: 1) research and development/industrial use, 2) aviation use, 3) gateway research and development/industrial use, and 4) an Accomack County recreational park. Construction in each of the WRP land parcels would include the installation of roads and utilities and the establishment of utility easements. Full build-out of the WRP is anticipated to take approximately 20 years.

Land owned by NASA within the WRP would be used primarily for aerospace activities including payload processing and aircraft operation and maintenance. Hangars are planned for construction on the northwest part of the NASA property. A payload processing facility (PPF) currently exists on the NASA property in an area north of the MSC campus.

The MSC property south of Mill Dam Road would be developed for research and development and industrial use. The MSC owns 25 ha (62) acres within the WRP site boundary; the MSC campus, which is located on the north side of Mill Dam Road (Route 798), encompasses approximately 13.4 ha (33 acres). The MSC campus and any activities related to MSC campus renewal will occur independently and are not considered part of the WRP development.

Accomack County Property north of Mill Dam Road would include construction of education facilities, an incubator building with classrooms and office space, and new roads. A baseball field, playground, and nature trails already exist on this property but would be relocated. Playground equipment would be moved across Mill Dam Road to the closed County landfill. The baseball field and nature trails may also be relocated to the landfill or to another County-owned public recreation area. Additional Accomack County property west of the closed landfill and south of Mill Dam Road would be used for recreational activities and maintained as a county park.

Accomack County would provide oversight to WRP tenants including implementation of the WRP Guiding Covenants and Restrictions. A WRP Site Plan Review Committee, consisting of representatives from NASA, MSC, and Accomack County, would review tenant's proposals and site plans and provide recommendations to WRP management regarding potential tenants.

Alternative One includes the same development as described under the Proposed Action on NASA and MSC property. However, approximately 6.1 additional ha (15 acres) of the southern Accomack County parcel would be developed to include research and development and industrial land uses. Under either action alternative, only the establishment of a road and utility easements would occur within the 14.2-ha (35-acre) footprint of the closed Accomack County landfill. No additional WRP development would take place in that area.

SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS: Impacts to resource areas under both the Proposed Action and Alternative One are summarized below. Any adverse impacts would be minimized and mitigation measures would be implemented as necessary. No adverse impacts would occur under the No-Action Alternative.

Topography and Drainage: Under both action alternatives, minor adverse impacts to topography and drainage would occur. WRP would mitigate impacts by incorporating permanent stormwater management measures into the site design and by implementing stormwater control measures during construction.

Geology and Soils: Under both action alternatives, no adverse impacts to geology are anticipated. Minor adverse impacts to soils are anticipated. The WRP would mitigate negative impacts to soils by acquiring Virginia Stormwater Management Program (VSMP) construction site stormwater permits as necessary, and by developing and implementing site-specific Stormwater Pollution Prevention Plans (SWPPPs) and Erosion and Sediment Control (E&SC) Plans.

Land Use: The land uses planned for the WRP are compatible with Accomack County zoning policies and the WRP Site Plan Review Committee would review potential tenants' plans to ensure consistency with uses approved for WRP. As such, no adverse impacts to land use are anticipated under either action alternative.

Surface Water: Under both action alternatives, minor adverse impacts to surface water are anticipated. WRP would mitigate impacts to surface water from construction activities by acquiring VSMP permits and by developing and implementing site-specific SWPPPs and E&SC plans.

Wastewater: Under both action alternatives, the WFF wastewater treatment plant (WWTP) has the capacity to treat the additional amount of wastewater from the WRP. As such, no adverse impacts to the WWTP are anticipated.

Stormwater: Under both action alternatives, minor adverse impacts to stormwater are anticipated. To mitigate impacts to stormwater conveyance and quality during construction WRP would obtain VSMP construction site stormwater permits. If required during operations, WRP would obtain a VPDES industrial stormwater permit and prepare a corresponding SWPPP for the permitted activity.

Groundwater: The estimated potable water demand for the combined WRP and WFF is below the WFF's existing groundwater withdrawal permit issued by the Virginia Department of Environmental Quality (DEQ). Therefore, development of the WRP under each action alternative would not result in an adverse impact to groundwater resources.

Wetlands: Under both action alternatives, up to 0.4 ha (1 acre) of wetlands would be adversely affected. Prior to construction, WRP would complete a jurisdictional wetland delineation in accordance with the U.S. Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual (USACE, 1987) and would avoid and minimize impacts to wetlands to the greatest extent practicable. If wetland impacts are unavoidable, WRP would acquire all necessary Federal, state, and local permits prior to construction and would provide compensatory mitigation to ensure no net loss of wetlands.

Floodplains: A small area of WRP lies within the floodplain and minor adverse impacts are anticipated under each action alternative. To mitigate impacts, WRP would ensure that construction activities comply with EO 11988 (Floodplain Management) and 14 CFR 1216.2 (NASA regulations on Floodplain and Wetland Management), which include notifying the public of actions that would occur within the floodplain and restoring the natural and beneficial functions of floodplains to the maximum extent possible.

Coastal Zone Management: A Coastal Zone Consistency Determination has been performed for WRP and the Virginia DEQ concurs that both action alternatives would be consistent with the enforceable policies of the Virginia Coastal Zone Management Program. Therefore, no adverse impacts to the Coastal Zone are anticipated.

Air Quality: Minor adverse impacts to air quality are anticipated under each action alternative. To mitigate impacts during construction, WRP would implement best management practices (such as applying water to a site to reduce dust emissions). If required during operations, WRP would obtain necessary air operating permits from the Virginia DEQ to ensure no adverse impacts to air quality would occur.

Noise: Minor adverse noise impacts are anticipated under each action alternative. To mitigate impacts, WRP would comply with local noise ordinances and State and Federal standards and guidelines for potential impacts to humans caused by construction activities. Workers near activities producing unsafe noise levels, both during construction and after the WRP facilities are operational, would be required to wear hearing protection equipment. Flights originating from the WFF runway would likely be intermittent and noise levels would be temporary. Additionally, any activities outside of typical work hours that could create disruptive noise levels would be coordinated directly with the persons affected by the planned activity

Hazardous Materials and Hazardous Waste: Under both action alternatives, WRP would use hazardous materials and generate hazardous waste; however only minor adverse impacts are anticipated. WRP would follow all federal, state, and local laws regarding handling and disposal and would implement necessary safety measures during construction activities and Park operation. Any WRP actions that would result in ground disturbance of the closed County landfill would be coordinated closely with the Virginia DEQ.

Radiation: Under both action alternatives, development of WRP would result in potential sources of radiation (e.g., lasers, radio frequency emitting systems, small radioactive sources for instrument calibration, etc.); however only minor adverse impacts are anticipated. WRP would obtain a Nuclear Regulatory Commission license when using a regulated nuclear material. Use of lasers at the WRP would be required to meet applicable safety standards. Operators of radio frequency emitting systems would be required to coordinate with the WFF Spectrum Manager and conduct appropriate analyses as needed; these analyses would be coordinated with any radio frequency system users/owners.

Vegetation: Under both action alternatives, forested land would be cleared for WRP. Under Alternative One, long term impacts to vegetation would be greater than under the Proposed Action due to the development of approximately 15 acres located south of Mill Dam Road and west of the closed Accomack County landfill. To mitigate adverse impacts to vegetation, a vegetative buffer would be maintained around the perimeter of the WRP site. The WRP partners and tenants would be required to preserve as much existing vegetation as possible, to re-vegetate

bare soils after soil disturbing activities, and to incorporate landscaping measures in areas that would be left as pervious surfaces (not paved). Accomack County would further mitigate the impacts to vegetation by implementing a gradual reforestation program on available properties.

Terrestrial Wildlife and Migratory Birds: Under both action alternatives, terrestrial wildlife and migratory bird habitat would be lost from the clearing of forested land and the conversion of open land to commercial and industrial development. Under Alternative One, long term impacts to vegetation would be greater than under the Proposed Action due to the development of approximately 15 acres located south of Mill Dam Road and west of the closed Accomack County landfill. To mitigate adverse impacts, a vegetated buffer would be retained around the WRP perimeter and tenants would be encouraged to retain native habitat to the greatest extent practicable. Accomack County would further mitigate the impacts to habitat by implementing a gradual reforestation program on available properties. Regarding disruption to wildlife from WRP activities, the WFF airfield currently operates an avian deterrent program to keep the aircraft approach zones clear for safety purposes. Any additional noise caused by WRP operations would be of low frequency, short duration, and comparable to what already exists with the avian deterrent program.

Threatened and Endangered Species: Since no State or Federally listed threatened or endangered species or Federally designated critical habitat occur within the WRP vicinity, no adverse effects to State or Federally threatened endangered species would occur under either action alternative.

Population: Under both action alternatives, adverse impacts to population would occur. However, due to the long time period anticipated for increased employment opportunities with WRP partners and tenants, these impacts would be minor. The largest impact to population would occur in Accomack County; the additional population that would result from the WRP is anticipated to comprise approximately 3 percent of Accomack County's population over the next 20 years. The four other counties where new WRP employees are likely to settle would result in a population increase of less than 1 percent per county over 20 years.

Recreation: Minor adverse impacts to recreation would occur under both action alternatives. Although the existing playground would be rebuilt on the closed County landfill and the baseball field would be moved to the landfill or to a new location, they may be closed to the public while the new ones are being constructed.

Under Alternative One, impacts to recreation would be greater than under the Proposed Action due to the development of approximately 15 acres located south of Mill Dam Road and west of the closed Accomack County landfill. This space would not be available to residents, employees, and students for recreation.

Employment and Income: Under both action alternatives, no adverse impacts to employment and income would occur. Construction of the WRP would result in a benefit to the local economy due to increased numbers of people in Accomack County during business hours and the potential increase in the use of local stores and businesses for purchases. Employment opportunities would also increase as a result of development of the WRP site and result in a beneficial impact to employment within Accomack County.

Health and Safety: Under both action alternatives, minor adverse impacts to health and safety would occur. Construction activities at the WRP site could result in short-term impacts. The capability of the local medical, fire, and police services to handle the additional people in the area is not anticipated to be exceeded; however, since there would be an increased demand on these services, minor impacts to health and safety could occur due to the WRP development. To mitigate impacts, safety procedures and appropriate training would be implemented at the WRP to ensure that adverse effects to human health and safety are minimized. Additionally, the increase in taxes generated by the additional WRP-employed families and businesses would add to the County's ability to implement public services such as medical, fire, and police expansion.

Cultural Resources: No adverse effects to historic properties or archaeological sites would occur under either action alternative; the Virginia Department of Historic Resources (VDHR) concurred with this determination. However, if unanticipated archaeological remains are identified during construction of the WRP, the WFF Facility Historic Preservation Officer would consult with the VDHR to determine the significance of the resource and the effects of the undertaking on the resource, and to identify the appropriate avoidance or mitigation measures, as appropriate.

Environmental Justice: It is not anticipated that disproportionately high or adverse impacts to low-income or minority populations would occur under either action alternative. The creation of new jobs within Accomack County that are directly and indirectly related to WRP would likely benefit low-income and minority populations.

Transportation: Under both action alternatives, temporary adverse impacts to traffic flow would occur during construction activities due to an increase in the volume of construction-related traffic in the vicinity of the WRP. No long-term adverse impacts to transportation are anticipated because the WRP would implement traffic flow mitigation measures including modifying and upgrading existing roads and intersections, and installing additional traffic devices including signal lights and/or stop signs in the vicinity of the WRP, where necessary.

Cumulative Effects: In accordance with NEPA and to the extent reasonable and practical, this EA considers the overall cumulative impact of the Proposed Action and other actions (both on and off WFF) that are related in terms of time or proximity. Adjacent to the boundary of the WRP site, the MSC is undergoing a campus renewal project that started in 2007 and is projected to continue through the year 2012. In addition, several residential developments are planned or are being constructed within Accomack County.

NASA has determined that minor adverse cumulative impacts to resources could occur when the impacts of the WRP are considered along with the impacts of the MSC campus renewal project and residential and business development within Accomack County. Cumulative impacts are anticipated for groundwater, wetlands, floodplains, air quality, vegetation, terrestrial wildlife and migratory birds, population, and health and safety.

NASA has identified no other issues of potential environmental concern.

Based on the final EA for the WRP, and review of underlying reference documents, NASA has determined that the environmental impacts associated with the proposed action will not individually or cumulatively have a significant impact on the quality of the human environment. Therefore, an environmental impact statement is not required.

Campbell

John H. Campbell Director NASA Wallops Flight Facility

<u>8/19/08</u> Date