



DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 San Marco Boulevard
JACKSONVILLE, FLORIDA 32207-8175

REPLY TO
ATTENTION OF

CESAJ-PPD-ES (ER 200-2-2)

JUL 08 2016

MEMORANDUM FOR RECORD

SUBJECT: L-29 Canal and South Dade Conveyance System Extension of 60 Day Recovery Period

1.0 INTRODUCTION

The objectives of this document are to summarize the environmental compliance performed for the L-29 Canal and South Dade Conveyance System (SDCS) Temporary Emergency Deviation and to determine if completed National Environmental Policy Act (NEPA) documentation is considered to be adequate for the extension of the recovery period associated with the emergency deviation. Documents related to this Memorandum for Record (MFR) include the following:

- *Environmental Assessment; G-3273 Constraint Relaxation/S-356 Field Test and S-357N Operational Strategy, U.S. Army Corps of Engineers, Jacksonville District, May 2015*
- *Environmental Assessment; L-29 Canal and South Dade Conveyance System Temporary Emergency Deviation to Affect Relief of High Water Levels within Water Conservation Area 3A, U.S. Army Corps of Engineers, Jacksonville District, February 2016*
- *Supplemental Environmental Assessment and Finding of No Significant Impact; L-29 Canal and South Dade Conveyance System Temporary Emergency Deviation to Alleviate High Water Levels in Water Conservation Area 3A, U.S. Army Corps of Engineers, Jacksonville District, May 2016*

2.0 PROJECT AUTHORITY

The Central & Southern (C&SF) Florida Project was initially authorized by the Flood Control Act of 1948, Public Law 80-858, enacted 30 June 1948. The remaining works of the Comprehensive Plan were authorized by the Flood Control Act of 1954, Public Law 83-780, enacted 3 September 1954.

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3.0 PROJECT LOCATION

The federal action affects an area within the C&SF Project located in south Florida and includes portions of Water Conservation Area 3 (WCA 3), Everglades National Park (ENP) and adjacent areas, including the Las Palmas Community adjacent to 8.5 Square Mile Area (SMA) and the SDCS. The 8.5 SMA is located approximately 20 miles southwest of Miami, approximately 10 miles north of Homestead, and 6.6 miles south of U.S. Highway 41 (Tamiami Trail). It is bounded on the west and north by a protective levee approximately seven miles in length, on the north by SW 104th Street, on the south by SW 168th Street (Richmond Drive), and separated from more intensively developed urban lands to the east by the L-31N flood protection levee and borrow canal.

4.0 PROJECT DESCRIPTION AND BACKGROUND

4.1 Increment 1 Field Test

The U.S. Army Corps of Engineers (Corps) initiated a field test under the authority of the Modified Water Deliveries (MWD) to ENP Project, to evaluate raising or removing the existing G-3273 stage constraint for inflow into Northeast Shark River Slough (NESRS) and operate the S-356 pump station for control of seepage into the L-31N Canal. The G-3273 constraint of 6.8 feet National Geodetic Vertical Datum 1929 (NGVD) was originally established as a flood protection measure. A stage of 6.8 feet NGVD at this gage has been used since 1985, prior to implementation of the field test, as a trigger to cease S-333 discharges from flowing south into NESRS as a protective measure for residential areas to the east, particularly the 8.5 SMA. The field test is the first increment in a series of three related, sequential efforts that will result in a comprehensive integrated water control plan, referred to as the Combined Operating Plan (COP), for the operation of the water management infrastructure associated with the MWD and Canal 111 (C-111) South Dade Projects. The first increment maintained L-29 canal maximum operating limit at 7.5 feet to improve flows to ENP from WCA 3A, while monitoring seepage into L-31 N Canal.

NEPA documentation for the Increment 1 field test was completed on 27 May 2015 with signing of a Finding of No Significant Impact (FONSI) incorporating an Environmental Assessment (EA). Field test duration was planned for approximately two years, with a minimum duration of one year. Implementation of the field test occurred from 15 October 2015 to 14 February 2016, after which the Corps proceeded with temporary emergency operations to alleviate high water levels within WCA 3.

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4.2 Temporary Emergency Deviation to Alleviate High Water Levels in Water Conservation Area 3A (L-29 Canal)

In correspondence dated 11 February 2016, the Governor of Florida requested that the Corps take immediate action to relieve flooding of the Everglades WCAs by raising the level of the L-29 Canal to 8.5 feet NGVD so that substantial volumes of water could be moved from WCA 3A to ENP through Shark River Slough. The Corps initiated a temporary emergency deviation to the operating limit constraint of 7.5 feet NGVD in the L-29 Canal on 15 February 2016, at the request of the Governor, for purposes of providing high water relief in WCA 3A. Due to the very strong El Nino this past dry season, WCA 3A has experienced unseasonable high water levels. The first half of the dry season (November 2015 - January 2016) was the wettest for this period since record keeping began in 1932. The temporary emergency deviation mediated high water levels within WCA 3A by allowing for the full discharge capacity through S-333 into the L-29 Canal in addition to the use of additional WCA 3A outlets such as S-152 into WCA 3B. The temporary emergency deviation also included other operational changes needed to mediate any concern with increased seepage from ENP into the SDCS.

NEPA documentation to support the temporary emergency deviation was completed on 12 February 2016 with signing of a FONSI, incorporating an EA. A Supplemental EA and FONSI were completed on 10 May 2016 to provide further documentation of the potential environmental effects resulting from the alternatives considered and the action taken. The temporary emergency deviation included the relaxation of the L-29 Canal stage constraint of 7.5 feet NGVD up to 8.5 feet NGVD for a period of 90 days from the date of implementation (15 February 2016). A 60 day recovery period was initiated on 15 May 2016 once the L-29 Canal constraint was returned to 7.5 feet NGVD. As part of the 60 day recovery period, the lowered operational ranges within the SDCS would remain until the recovery period was completed. During this time water levels were expected to recede to stages typical of recent hydrological conditions. In the absence of an extension, the 60 day recovery period will conclude on 10 July 2016.

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5.0 PROJECT NEED

Residents within the 8.5 SMA expressed concern during implementation of the temporary emergency deviation due to observed increases in ground and surface water. In response to these concerns, the South Florida Water Management District (SFWMD), in conjunction with the federal action, constructed temporary measures including the use of temporary pumps and an open channel connection between the C-358 Canal and the C-357 Canal prior to construction of S-357N; a gated control structure that will connect the C-358 seepage collection canal to the existing C-357 Canal, upstream of S-357 within 8.5 SMA. The SFWMD also constructed temporary plugs in the drainage swales located north and south of Richmond Drive, and a berm around the western end of the C-358 Canal consistent with design refinements associated with the C-111 South Dade Project. Design refinements associated with the C-111 South Dade Project include the extension of the L-357W Levee from the 8.5 SMA Detention Cell to the southern limits of Richmond Drive and the completion of the remaining levee segment to cross Richmond Drive, including construction of a ramp over the new levee segment to maintain western access to ENP, as currently anticipated under Contract 8 of the C-111 South Dade Project. The temporary plugs were constructed to help decrease potential increases in groundwater stages in the absence of the completion of the L-357W extension. The SFWMD also installed temporary culverts in the southern levee of the 8.5 SMA Detention Cell in an area where the planned degrading of the S-360W weir will take place, as currently anticipated under Contract 8A of the C-111 South Dade Project. This effort was undertaken by the SFWMD in order to limit the increase in water depth in the 8.5 SMA Detention Cell associated with the construction of an open channel connection mentioned above between the C-358 Canal to the C-357 Canal.

Efforts to move water out of the WCAs combined with a decrease in the volume of water entering the system, have allowed for improved stages within the WCAs. Current conditions as of mid-June anticipate the likelihood of above average conditions/flows through most of the wet season (reference attached operational strategy). Therefore, the Corps is proposing to extend the 60 day recovery period for purposes of maintaining lower canal levels along the L-31N and C-111 Canals, as well as to maintain flexibility to address potential 8.5 SMA flood mitigation issues identified during the temporary emergency deviation. Consistent with the ongoing 60 day recovery period, releases from WCA 3A via S-333 will continue to be made in accordance with the rainfall based management plan target while not exceeding the L-29 Canal average stage constraint of 7.5 feet NGVD. The 60 day recovery period will be extended until the approval of a revised Increment 1 operational strategy currently anticipated in October 2016.

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The operational strategy for the extension of the 60 day recovery period also takes into account the need to complete the C-358 Canal (Richmond Drive Seepage Collection Canal) and installation of S-357N (C-358 control structure), and completion of Contracts 8 (construction of the C-111 South Dade Northern Detention Area to fill the existing 2 mile gap in the hydraulic ridge system and provide a future hydraulic connection between the 8.5 SMA Detention Cell and the C-111 South Dade Northern Detention Area).

6.0 ENVIRONMENTAL COMPLIANCE

Operational guidance for the extension of the recovery period is described in the attached. Environmental effects of those operations are discussed within the temporary emergency deviation EA and FONSI dated 12 February 2016 and the Supplemental EA and FONSI dated 10 May 2016. Operational criteria as defined in the attached guidance with respect to the recovery period are within the latitude of what was previously specified for the high water deviation. Compliance and coordination, as required by NEPA and other environmental laws and policies as documented remains valid. No additional impacts from the federal action are expected that are not addressed in the prior NEPA documentation.

The L-29 Canal temporary emergency deviation would not adversely affect protected species. The U.S. Fish and Wildlife Service (USFWS) was contacted 11 February 2016 for notification of the proposed temporary emergency deviation prior to completion of the 12 February 2016 EA and FONSI. The USFWS indicated support for the effort, noting that staff would support consultation and conclusion of Section 7 responsibilities under the Endangered Species Act. Informal consultation for the L-29 Canal temporary emergency deviation was initiated with the USFWS on March 1, 2016 during preparation of the Supplemental EA and FONSI dated 10 May 2016. Consultation under the ESA has not been completed; however the USFWS indicated support for the temporary emergency deviation as a means to reduce the impacts of high water to listed and non-listed species within the project area.

The L-29 Canal temporary emergency deviation is not anticipated to adversely affect water quality and the requirement to obtain state water quality certification has been previously waived by the FDEP. In addition, an order (Emergency Measures-High Water Scenarios OGC No. 16-0286) was signed on 11 May 2016 by the FDEP to continue to operate structures specifically referenced in the Department's emergency final order (Emergency Authorization for Temporary Operational Changes to Address High Water Conditions in the South Florida Region, OGC case Nos: 00-0889) dated 11 February 2016, through 30 November 2016. The Corps has previously determined that the temporary emergency deviation is consistent to the maximum extent practicable with the enforceable policies of the Florida's approved Coastal Zone Management Program. FDEP previously concurred on 12 February 2016 and on 4 April 4 2016.

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The L-29 Canal temporary emergency deviation has been coordinated with the Florida State Historic Preservation Officer and the appropriate federally recognized Tribes in accordance with the National Historic Preservation Act and consideration given under the NEPA. The Corps has determined that the temporary emergency deviation has no adverse effect on historic properties eligible or potentially eligible for the National Register of Historic Places.

The federal action will maintain the authorized purposes of the C&SF Project, which include flood control, navigation, preservation of fish and wildlife, drainage, salinity control and water supply. Implementation of an extended recovery period takes into account the need to maintain the authorized level of flood mitigation for 8.5 SMA and flood damage reduction along the L-31N and C-111 Canals, given current system conditions.

6.0 DETERMINATION AND CERTIFICATION

It is the position of the Jacksonville District that, in light of the impacts associated with this project, and demonstrated compliance with environmental regulations, the proposed action continues to meet NEPA requirements and preparation of additional NEPA documentation is not required. Compliance and coordination, as required by NEPA and other environmental laws and policies as documented within the EA and FONSI dated 12 February 2016 and the Supplemental EA and FONSI dated 10 May 2016, remains valid. The project is in compliance with the NEPA and Corps regulation ER 200-2-2 for implementing NEPA on Civil Works actions.



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