# RURAL LANDS WEST
# RESPONSES TO PUBLIC NOTICE COMMENTS

**March 2025**

This document provides Collier Enterprises' responses to comments submitted by the Sierra Club, the Conservancy of Southwest Florida, and the Center for Biological Diversity (together, "the Environmental Groups") on October 16, 2024, in response to the U.S. Army Corps of Engineers (Corps) September 19, 2024, public notice of Collier Enterprises' application for a Clean Water Act (CWA) section 404 permit in connection with the Rural Lands West (RLW) Project.

The Project has been the subject of two public comment periods since the applicant submitted its initial CWA section 404 permit application to the Corps in October 2016. The Corps originally issued a public notice for RLW in July 2017. At that time, the U.S. Fish and Wildlife Service (USFWS or the Service) was reviewing the Eastern Collier Multiple Species Habitat Conservation Plan (ECMSHCP) and associated incidental take permit (ITP) applications by 13 land owners whose lands comprise the ECMSHCP area. The 151,000-acre ECMSHCP area encompasses the RLW project site. In March 2020, the Corps paused review of the section 404 permit application for RLW during the USFWS review of the ECMSHCP and ITP applications. In November 2020, additional design modifications were implemented and submitted to the Corps. These modifications included preservation of a third wildlife corridor through RLW, a new wildlife crossing under Oil Well Road, and incorporation of over 70 additional acres of wetland restoration into the compensatory wetland mitigation plan.

The State of Florida assumed Section 404 permitting authority on December 22, 2020, and the RLW application was the transferred from the Corps to the Florida Department of Environmental Protection (FDEP) for processing. In July 2022, the ECMSHCP landowners withdrew their ITP applications in order to proceed with project-specific USFWS reviews, but agreed to continue working together and with their wildlife conservation group partners to implement the tenets of the ECMSHCP. FDEP continued to process the RLW 404 permit application until federal court litigation led to the Corps resuming section 404 permitting. On February 15, 2024, as a result of that litigation, the Corps once again became the sole section 404 permitting authority for the State of Florida, and the RLW 404 application was returned to the Corps for processing. The Corps initiated a second public comment period on September 19, 2024, and accommodated a request to extend the comment period from 30 days to 60 days (or until November 21, 2024).

The comments submitted by the Environmental Groups during the most recent comment period refer to several general topics. The comments are listed below in italics according to these general topics and are followed by the applicant's responses.

***Comment: Concerns About the Overall Project***

*The Environmental Groups responded to the public notice with concern about the overall project.*

**Response**

The overall project will transform portions of large-scale agricultural operations in eastern Collier County Florida into a residential community with a mix of commercial and recreational elements.

The community is designed to feature extensive preservation of high-value natural areas in a rural setting, and provide affordable housing in an area planned for future growth and resiliency.

The proposed Corps Clean Water Act (CWA) section 404 permit would authorize water-related work in relatively small portions of the project site. Specifically, the Corps permit would authorize the discharge of fill material into 262 acres of wetlands, including 260 acres deemed to be waters of the United States (WOTUS), comprising less than three percent of the 10,265-acre site. These permitted discharges will primarily be limited to placement of fill material to support road crossings and surface water management facilities. The areas where the permitted discharges will occur are primarily comprised of isolated and degraded wetlands within areas currently in large-scale agricultural use, such as tomato fields. Impacts to wetlands have been avoided and minimized to the extent practicable. The permitted impacts will be more the fully offset by the preservation and enhancement of 4,060 acres (over 90 percent) of on-site wetlands.

The Environmental Groups' comments reflect a fundamental misunderstanding of the nature of the Corps action. The CWA section 404 permit the Corps is proposing to issue would not authorize or control the overall project, but instead would authorize and control only the discharge of fill material into limited areas of WOTUS that cannot feasibly be avoided. The overall project is separately authorized and controlled by a range of local and state permits and authorizations, including a County zoning approval, a County development order, a State Environmental Resource Permit (ERP), and a State Water Use Permit. Those separate permits and authorizations control many of the characteristics of the community addressed by the comments, including the number of residential homes and businesses that will be established within the community. Those processes entail their own forms of public involvement and review that are separate from the Corps permitting process under CWA section 404.

Nonetheless, the environmental impacts of the overall project beyond the discharge of fill material into 262 acres of wetland features have also been considered by the Corps and are addressed below.

***Comment: Eastern Collier Multi-Species Habitat Conservation Plan***

*The Environmental Groups expressed concern over the withdrawal of Incidental Take Permit (ITP) applications associated with the Eastern Collier Multi-Species Habitat Conservation Plan (ECMSHCP), including the applicant's ITP application. They also request that the agencies revisit a prior draft Biological Opinion associated with the ITP applications when evaluating the Project.*

**Response**

The applicant is a founding participant in the Florida Panther Protection Program (FPPP or the Program). The FPPP calls for preservation of over 100,000 acres of valuable, interconnected habitat located on private lands in Eastern Collier County that are otherwise open to development, and establishment of the multimillion dollar Marinelli Fund to pay for conservation activities to benefit the Florida panther and other species.

The FPPP participants originally decided to pursue the conservation framework specified in the FPPP through submission of collective ITP applications covering a 50-year term and an comprehensive Habitat Conservation Plan associated with those applications. The original framework would have provided authorization for unintentional take of listed species – in the form of harassment only for Florida panther and most other covered species – over a 50-year planning period for projects located within a 40,000-acre covered area (mostly comprised of altered land with limited habitat value), permanent preservation and enhancement of over 100,000 acres of

high value, interconnected habitat and wildlife dispersal corridors, and creation of a multimillion dollar fund to pay for wildlife crossings and other species benefits. The areas identified for preservation connect public conservation lands, including the Florida Panther National Wildlife Refuge, the Big Cypress National Preserve, Corkscrew Regional Ecosystem Watershed, and the Okaloacoochee Slough State Forest, and can support expansion of the Florida panther's range and population, as well as dispersal of other protected species.

The ITP applications were submitted to USFWS in 2010 by twelve members of the Eastern Collier Property Owners (ECPO), including the applicant. The geographic and temporal scope of the ECMSHCP, and the fact that it was being sponsored by twelve separate private landowners (along with four wildlife conservation organization partners), made the ITP applications and ECMSHCP especially unique. Following years of delays processing the ITP applications, the landowners withdrew their ITP applications in July 2022 but committed to continue to follow the tenets of the ECMSHCP, and implement the underlying FPPP. The applicant has specifically committed to follow the tenets of the ECMSHCP and FPPP in the implementation of the current Project, including as binding conditions of the Corps 404 permit. The applicant specifically designed the Project to provide the same overall conservation benefits that it would have provided under the ITP applications and ECMSHCP.

FPPP Background. The FPPP is a collaborative framework developed by the members of ECPO and four leading conservation organizations. In 2007, ECPO members began discussions with Audubon of Florida, Collier County Audubon Society, Defenders of Wildlife, Florida Wildlife Federation and other groups about methods to conserve the Florida panther, with a goal of providing an appropriate balance between farming, residential and commercial development, and habitat conservation in eastern Collier County. These discussions culminated in a June 2008 Memorandum of Understanding (MOU). The 2008 MOU establishes a partnership among ECPO, Audubon of Florida, Collier County Audubon Society, Defenders of Wildlife, and Florida Wildlife Federation to establish and advance the FPPP.[1]

The FPPP provides for placement under permanent preservation of a significant, contiguous range of panther habitat on privately owned land in eastern Collier County. The FPPP is designed to preserve habitat and open space closer in proximity to public lands, while focusing future development in clustered areas of land already used by agriculture and other activities and proximate to existing residential and commercial development. This approach generally reflects the Collier County Rural Land Stewardship Program (RLSP), an incentive-based land preservation and development planning program. However, the FPPP provides significant conservation benefits beyond those available through the RLSP, including through establishment of the Paul J. Marinelli Florida Panther Protection Fund (Marinelli Fund) to provide for additional habitat restoration, panther crossings and acquisition of additional conservation land. The resulting conservation benefits represent added benefits not required by any existing law or regulation.

Contributions to the Marinelli Fund would be derived from real estate transfer fees and a surcharge on the use of panther mitigation habitat units. Specifically, the applicant and other ECPO members will contribute $350 per acre to the Marinelli Fund, or to the Fish and Wildlife Foundation of Florida Fund, as construction and earth mining projects within the ECMSHCP area (referenced as

[1] *See* www.FloridaPantherProtection.com.

Covered Activities in the ECMSHCP) are initiated.[2] In addition, the Marinelli Fund will receive a per-unit fee of $200 each time a home within the ECMSHCP area is sold (including both initial sales and re-sales).[3] The Marinelli Fund is estimated to generate over $100 million for conservation of the Florida panther and other species. It will be used to initiate and further conservation activities, including such initiatives as enhancement and management of wildlife corridors; location and construction of panther and other wildlife crossings and fencing under and along roadways; funding for land acquisition, enhancement, and/or management, to provide additional species habitat; and scientific research relevant to species conservation.

Another important aspect of the FPPP is its collaborative approach to conservation that includes participation by major landowners in Collier County working together with leading wildlife conservation organizations. If successful, the Program may provide a framework for conservation and recovery efforts in other parts of the State of Florida and nationally. It employs comprehensive, up-front land use planning to preserve more than 100,000 acres of highly valuable, privately owned land while ensuring that future infrastructure and development avoids that habitat. It also ensures through contributions to the Marinelli Fund that significant additional mitigation and funding will be provided to benefit the panther and other species. It has been developed in careful consideration of input from the Service to ensure that it complements other panther conservation initiatives in Florida, such as the implementation of panther crossings and preservation.

The FPPP originally envisioned that the ECPO members would "undergo a federal consultation process" with the USFWS and "develop a Conservation Agreement or its equivalent" to implement the FPPP.[4] Accordingly, the ECPO members prepared the ECMSHCP and submitted it to USFWS in support of their collective applications for ITPs to authorize "take" of listed species incidental to activities on their lands. The ECMSHCP reflected the framework of the FPPP, and was designed to conserve over 100,000 acres of valuable habitat on privately owned lands zoned for development in support of the ITP applications. The areas identified for new covered activities within the ECMSHCP, including residential and commercial development, totaled less than 40,000 acres – which is substantially less than the areas available for such development under the existing RLSP.

On July 15, 2022, the applicant submitted a letter to the USFWS requesting the removal of the Project site and other land owned by the applicant from its ITP application (first submitted in 2010). The applicant's letter noted that several important steps remained to be completed before the USFWS would be prepared to issue ITPs acceptable to both the USFWS and the applicant, and the timeline to complete those steps was not consistent with the Project timeline. On July 28, 2022, all ECPO members withdrew their ITP applications entirely in order to proceed with project-specific ESA reviews, including incidental take authorization. The ECPO members stated at that

[2] This per-acre fee as it applies to RLW will be derived from construction, as earth mining is not planned within the Project site. The per-acre fee will be deposited on a lump sum basis no later than 90 days after the closing of the first dwelling unit sold within RLW.

[3] The amount of the per-unit fee will be adjusted periodically to account for adjustments in the Consumer Price Index.

[4] MOU, *available at* www.floridapantherprotection.com.

time that they intend to continue working together with their conservation partners toward implementation of the tenets of the HCP as they move forward on individual projects.

The applicant is therefore seeking coverage for any incidental take associated with its projects through ESA consultation on a project-specific basis rather than through submission of ITP applications with the other ECPO members. The applicant remains committed to working in coordination with the other ECPO members to implement the tenets of the ECMSHCP and the underlying FPPP, each in connection with their own projects.

The applicant believes that the tenets of the ECMSHCP offer significant additional conservation benefits beyond those typically achieved by individual projects, and remains committed to following this approach in the implementation of the Project. Special conditions documenting the applicant's commitment to follow the tenets of the ECMSHCP will be included in the terms and conditions of the CWA 404 permit.

The conservation commitments provided by the applicant, including the permanent preservation of extensive, valuable habitat including wildlife dispersal corridors and areas proximate to existing public lands, will provide valuable conservation benefits. By contrast, the areas that will be impacted by the discharges of dredged or fill material under the requested CWA section 404 permit (and the areas where development will occur) have minimal conservation value. They are located on the western portions of the property near existing development and are comprised largely of previously-cleared lands that are currently used for large-scale agricultural operations. The applicant and the Corps have ensured, through coordination with the USFWS and incorporation of permit conditions recommended by the Service, that the Project will not result in jeopardy to listed species.

In sum, RLW is consistent with the tenets of the ECMSHCP and the underlying FPPP, will provide important conservation and public benefits, and is laying the foundation for continued implementation of the ECMSHCP tenets by future projects undertaken by the applicant and the other ECPO members. The applicant will continue to follow the tenets of the ECMSHCP and FPPP as a condition of its requested 404 permit, the result of which will provide conservation benefits well in excess of the mitigation required to offset impacts under CWA section 404.

***Comment: Project Violates Section 7 of the Endangered Species Act***

*The Environmental Groups stated that the Project, as designed, would violate Section 7(a)(2) of the Endangered Species Act (ESA) by authorizing an activity that is likely to jeopardize the continued existence of the Florida panther. They reference the Project site, located near the Florida Panther National Wildlife Refuge (FPNWR), as being essential for the long-term survival of the panther population. They also reference previous determinations issued by the USFWS under the draft Biological Opinion associated with the ECMSHCP and associated ITP applications.*

**Response**

As explained in the Biological Assessment for the Project, the issuance of the CWA section 404 permit would not authorize activity that is likely to jeopardize the continued existence of the Florida panther or any other ESA-listed species. The applicant anticipates that these determinations

will be confirmed through ESA section 7 consultation between the Corps and the USFWS.[5] In addition, as described previously, the Project provides extensive benefits to listed species and their habitat that would not occur in the absence of the Project.

RLW will include conservation measures that will be implemented to preserve and restore habitat for the Florida panther, as well as other wildlife including but not limited to ESA-listed species. These conservation measures include the establishment and conservation of SSAs 14, 15, 17, and 18 through the Collier County RLSP. As part of the Collier County approval of the Project, the applicant has designated SSAs on over 12,000 acres of land within the RLSA. In 2008, Collier County approved two separate SSAs totaling 6,966.3± acres (SSA 14 and SSA 15) that will be associated with the Project. SSA 17 and SSA 18 total 5,406.3± acres and were approved by Collier County in 2021 and 2022, respectively. These SSAs are comprised of environmentally sensitive lands and wildlife habitat within the Camp Keais Strand. The Florida Forever program currently lists the land included in SSAs 14 and 15 as "High Priority" parcels remaining for targeted acquisition, reflecting its high environmental value. These areas have previously been identified as important habitat for large mammals including the Florida panther and represent a significant step towards restoring Camp Keais Strand as a large mammal wildlife corridor connecting CREW lands and Corkscrew Swamp to the north, to the FPNWR to the south.

**Permanent Preservation of over 6,500 Acres of Panther Habitat.** The applicant proposes to designate over 6,500 acres of land that will be conserved as habitat compensation for the Florida panther, including areas within Stewardship Sending Areas (SSAs) that were established under Collier County's Rural Land Stewardship Program (RLSP). These lands were assessed using the USFWS Panther Compensation Calculator. The Panther Compensation Calculator is the currently accepted assessment methodology for quantifying loss of panther habitat and compensation provided through habitat restoration and enhancement (USFWS 2012). Using the Panther Compensation Calculator, it was determined that the Project's proposed habitat compensation will provide over 4,500 Panther Habitat Units (PHUs) beyond what is required to compensate for any habitat impacts associated with the project.

**The Draft Biological Opinion for the ECMSHCP and Associated ITP Applications Did Not Find Jeopardy.** The Environmental Groups' comments incorrectly assert that the draft Biological Opinion for the ECMSHCP found that implementation of construction and earth mining projects within the ECMSHCP area (referenced as Covered Activities in the ECMSHCP) would jeopardize the continued existence of the Florida panther. Specifically, the comments assert that the draft Biological Opinion found that the Covered Activities, when taken together, would result in a statistically significant increase in the risk of extinction for the Florida panther, due to estimated panther vehicle mortality (PVM). These assertions are incorrect for multiple reasons. First, the action reviewed in the ECMSHCP Biological Opinion is a different action by a different agency with a far greater scope: USFWS authorization of incidental take by a variety of activities within a 151,000 acre area over a 50 year planning horizon. RLW is simply one project within that area. The action here is issuance of a Corps CWA permit that would authorize discharges of fill material into 260 acres of waters of the United States in connection with the RLW project. Second, the

[5] The proposed Corps permit would authorize the discharge of fill material into 262 acres of wetlands on the site. Many of the Environmental Groups' comments do not focus on potential impacts to listed species of the discharges authorized by the permit, and instead address aspects of the project well beyond the scope of the proposed Corps permit. Nonetheless, this response addresses concerns raised with the overall project and not only those aspects that would be authorized by the proposed permit.

draft ECMSHCP Biological Opinion was a draft (not final) Biological Opinion, and thus never reached the stage of making final determinations. Third, the draft Biological Opinion did not offer even a draft or tentative determination of jeopardy, much less a final determination of jeopardy.

Indeed, the PVM analysis in the draft Biological Opinion focused on projected distant future traffic conditions on offsite public roadways outside the ECMSHCP area and the risk that vehicles operated by third parties would collide with panthers on those roadways in the future. The PVM analysis was not focused on construction or mining activities within the ECMSHCP area, including any potential incidental take associated with construction or mining, because no PVM was expected to occur within the ECMSHCP area as part of any construction or mining activities. Rather, the PVM analysis conceptually projected external roadway conditions at full build-out of the entire ECMSHCP area (not just RLW) decades into the future (long after the work authorized by any section 404 permit issued for RLW will be complete). Critically, the draft Biological Opinion recognized that projected future PVM levels cannot be known with certainty, and cannot be attributed to an applicant for incidental take purposes where (as here) many external factors influence traffic on public roadways and influence the risk of PVM, including the presence or absence of wildlife crossings and fencing, patterns of development, traffic levels, roadway design, vehicle speed, and driver skill and behavior. These variables are not controlled by the applicant, and future PVM cannot be attributed to an applicant on the basis of its CWA 404 permit application. Finally, the geographic scope of the draft Biological Opinion associated with the ECMSHCP was much greater than the RLW project site.

The draft Biological Opinion considered the impact of authoring incidental take associated with 45,000 acres of development and mining activities within an approximately 150,000-acre area over a 50-year period, not development of RLW individually or the Corps permit in particular. The Corps 404 permit for RLW will authorize discharges of dredged or fill material into 262 acres of wetlands. These discharges are primarily limited to the placement of fill material within existing agricultural areas to allow infrastructure construction in the form of road crossings and surface water management facilities, representing less than three percent of the approximately 10,265 acre project site (over 4,500 acres of the project site will be preserved and placed under a conservation easement and over 960 acres will remain in agriculture). The comments do not recognize or account for important differences between the federal action analyzed in the ECMSHCP Biological Opinion and the Corps permit for the RLW project.

**Offsite Traffic Is Not a Basis for a Jeopardy Finding.** The CWA section 404 permit does not authorize or regulate traffic on offsite state and county roadways, conditions on those roadways, or driver behavior. Nonetheless, the applicant and USFWS are considering the impacts of regional, offsite traffic. USFWS requested a traffic analysis specific to RLW. The traffic analysis conducted by the applicant's traffic consultant – which was prepared using the District One Regional Planning Model developed by the Florida Department of Transportation – considers existing conditions, traffic demands and levels of service, anticipated regional roadway improvement projects, and the impact of alternative development scenarios on traffic conditions. The analysis demonstrates that, in a modeled scenario in which the Project has been fully constructed, only a relatively modest increase in average annual daily traffic (AADT) volume is associated with RLW, and the vast majority of this projected increase is on roads to the west of the Project site in more developed areas of Collier County. Indeed, in 2042, the projected increase in AADT volume associated with RLW amounts to approximately 15.9 percent of the total projected background traffic in that year. Of this, 79.8 percent of the modeled increase above future background traffic

would be to the road network west of RLW, in more developed areas where PVM is less likely and habitat is already fragmented by the existing Golden Gate Estates community located immediately west of the Project site – which is developed in a grid-like pattern following Collier County's base zoning of one dwelling unit per five-acre area – as well as other existing development. Thus, future modelled traffic increases associated with the Project are only 15.9 percent higher than modelled traffic without the Project, and the vast majority of that traffic is projected to occur in already developed areas.

Furthermore, future modelled increases in traffic do not provide a valid basis to project future PVM levels. As the Service has recognized, many factors influence the risk of collisions between vehicles and panthers, such as the presence or absence of wildlife crossings and fencing along roadways (which determine panther access to roadways), roadway design and speed limits, vehicle speed, driver skill and behavior, locations and types of panther habitat adjacent to roadways, and panther occurrence along roadways. Even on roadways with high speeds and traffic volumes and adjacent panther habitat, PVM can be virtually (if not entirely) eliminated by panther fencing and crossings, as has occurred along the Alligator Alley portion of Interstate 75. Studies have demonstrated that statistical associations between traffic volumes and PVM are either weak or nonexistent.[6] Thus, increases in traffic volume do not inevitably increase PVM, and can actually correspond with decreases in PVM (e.g., where accompanied by panther fencing and crossings, as in the Alligator Alley example). Therefore future PVM levels, or even general increases in PVM levels, are not reasonably certain along any particular roadway or group of roadways, and uncertainty over future PVM levels only increases over time. Furthermore, and equally important, neither the applicant nor the Corps permit (authorizing 260 acres of wetland fill) is the cause of PVM because neither controls the factors that actually determine PVM, including offsite roadway design (particularly fencing and crossings), speed limits, or driver behavior. Consequently, future offsite traffic conditions do not provide a basis to conclude that issuance of a Corps CWA section 404 permit for RLW will cause future offsite traffic conditions that will jeopardize the continued existence of the Florida panther. (Vehicle operation during RLW construction on roadways internal to RLW after construction will be subject to speed limits of 25 mph or less and will not pose a risk of PVM).

***Comment: Analysis by Dr. Robert Frakes on Impacts to Panther Habitat***

*The Environmental Groups rely on analysis by Dr. Robert Frakes to argue that the Panther Habitat Assessment Model (PHAM) overestimates the amount of land available for use by panthers. Environmental Groups argue that application of the PHAM neither ensures against jeopardy nor ensures that impacts are minimized.*

[6] See, e.g., Technical Memorandum, "Statistical review of Future Roadkill Estimation Method (FREM) used by USFWS South Florida Ecological Services Field Office staff," prepared by Megan D. Higgs, Ph.D., Statistics (Nov. 2020), identifying several serious flaws in assuming a 1:1 relationship between increases in traffic volumes and increases in PVM including (i) limited technical documentation in support of to validate the methodology; (ii) the methodology's failure to adequately acknowledge or justify numerous assumptions, (iii) the weak, if any, statistical associations between traffic volumes and PVM, and (iv) the methodology's failure to account for and quantifiably estimate known sources of uncertainty.

**Response**

The Frakes analysis of impacts related to the RLW and Bellmar developments[7] on panther breeding habitat relies on flawed scientific assumptions and methods, and imprecise model resolution. These flaws and shortcomings lead to faulty presumptions about and unsupported estimates of the amount of habitat required to support panthers. As demonstrated below, the Frakes model in its current form is incapable of accurately estimating the amount and capacity of panther breeding habitat at project-level scales in either a pre- or post-development condition.

The primary limitations of Frakes' landscape-scale panther habitat model[8] are specifically addressed in the USFWS draft Species Status Assessment for the Florida Panther.[9] The USFWS explains the limitations of the model, which render it an unsuitable tool for panther habitat analyses at the scale of RLW, as follows:

- "First, the South Florida RFP model (Frakes et al. 2015) employed grid cells of 1 $km^2$, a very large grid cell size relative to the resolution of many readily available GIS data layers in Florida…A grid cell size of 250 m (0.06 $km^2$) would have overcome the spatial error of the telemetry data and would have allowed for a resolution 16 times smaller than the resolution used in the study." USFWS (2020) at 98.
- "Second, Frakes et al. (2015) based their model on a probability of presence design using an extensive panther telemetry dataset overlain on a grid with 1-$km^2$ cell sizes to inform panther presence. Grid cells lacking telemetry locations were assumed to represent true absences…However, these data were limited to an existing VHF radio-telemetry dataset with an inherent sampling bias based on the location of panther capture effort and individual panthers targeted for specific sampling objectives during their period of study...Therefore, there was a reasonable likelihood that some locations assumed to be absences were instead 'pseudo-absences.' For example, occurrence records of adult breeding-aged panthers, including den locations and adult females with dependent-aged kittens, *have been confirmed in areas outside of the areas mapped by [Frakes et al. (2015)]* as areas predicted to have a high probability of presence. Thus, the model appears to have under-represented the value of habitats used by panthers in some areas." *Id.* (emphasis added).
- "Third, Frakes et al. (2015) did not consider agricultural lands (i.e., croplands, sugar cane fields, citrus groves, ornamentals) to be edge-forming, even when these agricultural lands were adjacent to forested habitats. Forest edge was used as a measure of prey availability, and the model identified forest edge as one of the most important factors determining panther presence. The use of agricultural lands by breeding-aged panthers is supported by

[77] The applicant considers RLW and the associated 404 permit application to be separate from the Bellmar project and associated 404 permit application. The purpose and need for both projects are separate, and each project has independent utility and would be constructed absent the construction of the other. Furthermore, each project is being reviewed by the Corps and other agencies with full awareness and consideration of the other project. Potential impacts associated with Bellmar are addressed herein because they were addressed in the Frakes analysis.

[8] Frakes, R. A., R. C. Belden, B. E. Wood, and F. E. James. 2015. Landscape analysis of adult Florida panther habitat. PLoS One 10(7): e0133044. https://doi.org/10.1371/journal.pone.0133044 ("Frakes et al. (2015)").

[9] USFWS. 2020. Species Status Assessment for the Florida Panther. Version 1.0, September 2020. Vero Beach, Florida ("USFWS (2020)").

habitat use studies (Land et al. 2008, Onorato et al. 2011) and verified occurrence records…and these lands contribute to the functionality of panther habitat, especially when juxtaposed within a mosaic of natural forest cover types." *Id.*

To illustrate how these limitations result in flawed estimates of the amount and capacity of panther breeding habitat relative to the scale of RLW and Bellmar, consider the figures below.

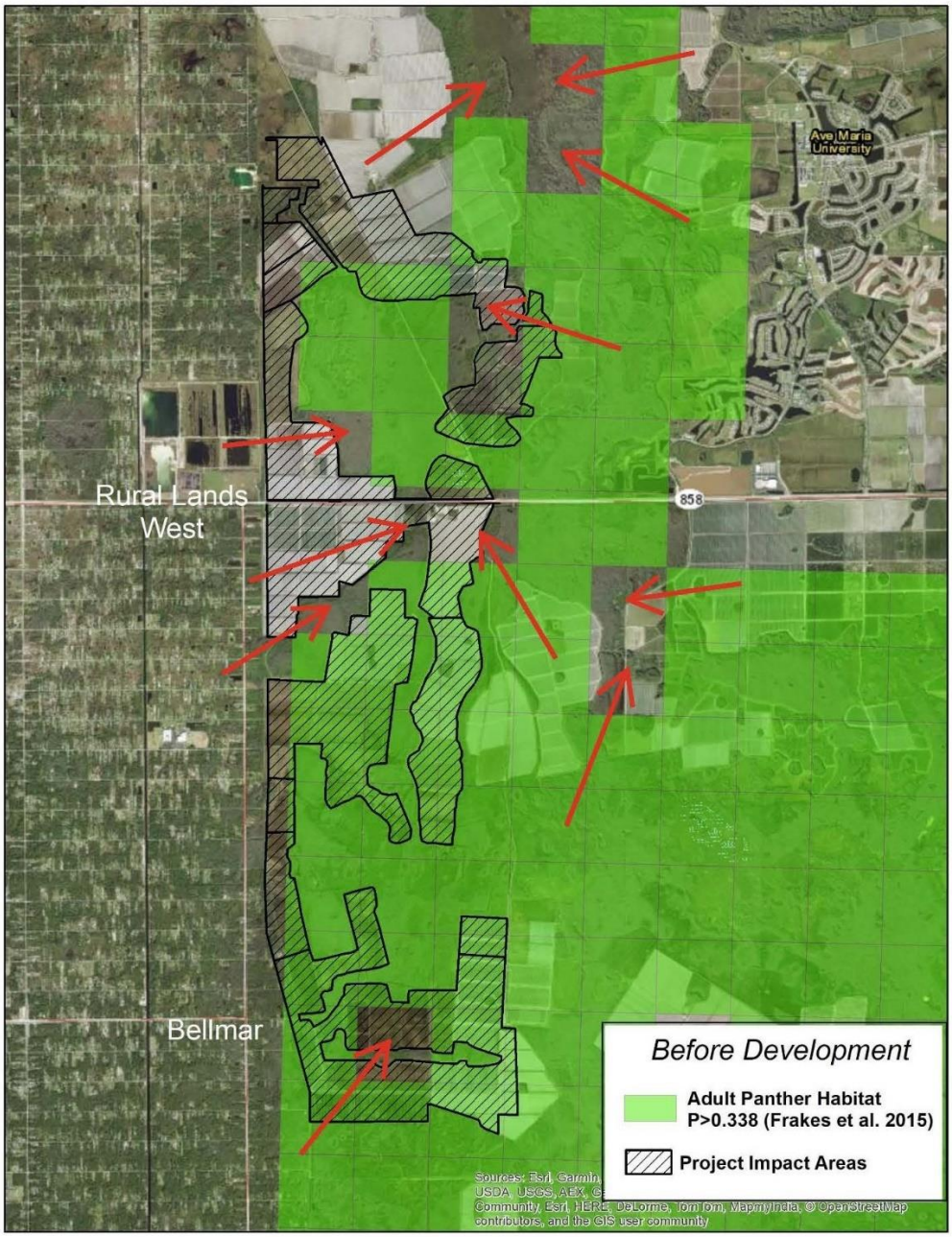


**Figure 1.** Adult panther habitat currently existing in the vicinity of the proposed Bellmar and Rural Lands West developments.

**Figure 1.** Figure 1 from Frakes (2023)[10] for RLW and Bellmar. The red arrows indicate pre-development 1-km$^2$ grid cells from the Frakes et al. (2015) landscape-scale model that contained suitable panther habitat and adult panther radiotelemetry and GPS data points but were not selected by the model. These figures illustrate the improper use of a landscape-scale model for project-scale analyses and the associated erroneous results, including the improper exclusion of large areas from the calculation of panther habitat due to coarse model resolution.

[10] Frakes, R.A. 2023. Supplemental Report on the Potential Impacts to Panther Habitat From the Proposed Bellmar and Rural Lands West Development Projects. Report submitted to the Conservancy of Southwest Florida. https://conservancy.org/wp-content/uploads/2023/11/Supplemental-Report-on-the-Potential-Impacts-to-Panther-Habitat-from-Bellmar-and-RLW-projects_11.23_Frakes.pdf ("Frakes (2023)").

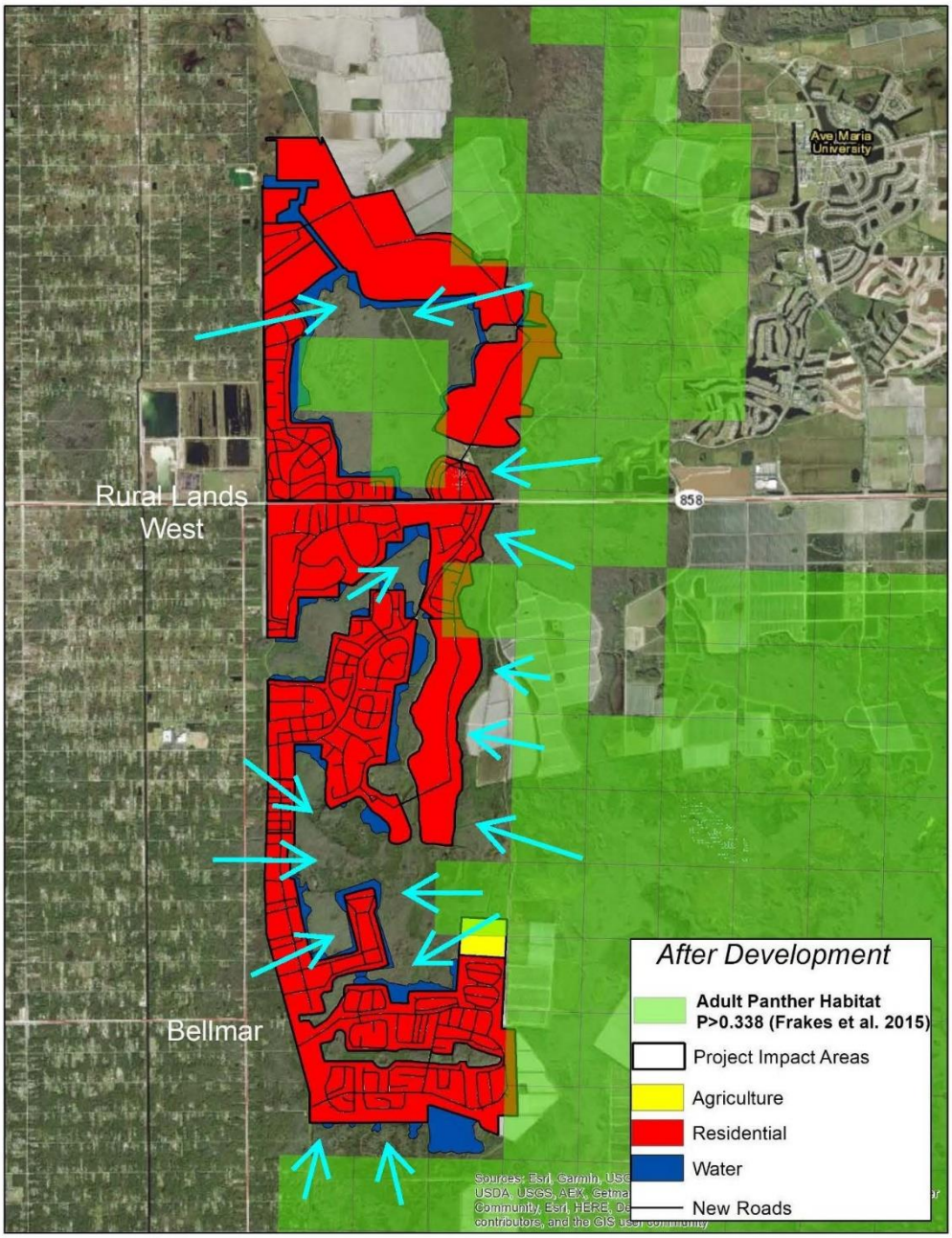


**Figure 2.** Model prediction of adult panther habitat that will remain after development of Bellmar and RLW.

**Figure 2.** Figure 2 from Frakes (2023) for RLW and Bellmar. The blue arrows indicate post-development 1-km$^2$ grid cells from the Frakes et al. (2015) landscape-scale model that contain suitable panther habitat and adult panther radiotelemetry and GPS data points but were not selected by the model. The 1-km$^2$ grid cells are far too coarse to accurately quantify available habitat in the post-development condition that are accessible to panthers and their prey base and are likely to be utilized post-development.

The Frakes declaration[11] (at ¶ 37) notes that the Frakes model predicted a loss of 10 $km^2$ or 2,471 acres of habitat associated with the Bellmar project. Figures 1 and 2 illustrate the limitations of the landscape-scale model predictions for project-scale analyses, as serious estimation errors were present for both the pre-development and post-development analyses. The primary source of these errors is the large 1-$km^2$ grid-cell size used for the modeling. Frakes et al. (2015) justified this grid-cell size by stating, "This grid size was chosen to account for telemetry error (within 124–230 m) and because of our interest in analyzing panther habitat characteristics *at the landscape scale*." (emphasis added). However, the application of a landscape-scale model at project-level is seriously compromised, because a 1-$km^2$ grid cell contains a mix of habitat and non-habitat at that resolution that will invariably distort model results relative to fine-scale models.

However, even considering the model's intended use at a landscape scale, the panther Species Status Assessment, as noted above, stated that "[a] grid cell size of 250 m (0.06 $km^2$) would have overcome the spatial error of the telemetry data and would have allowed for a resolution 16 times smaller than the resolution used in the study." USFWS (2020) at 98. The only apparent reasons for not using the more refined 250-meter grid cell size would be the level of effort required for model data preparation and model run times, neither of which would seem prohibitive. Regardless, it is certain that the Frakes acreage estimates for pre-development and post-development adult panther habitat within RLW represent significant scientific errors and the analysis is not valid for the RLW project.

Figures 3 and 4 in the Frakes declaration (at ¶ 38) are interpolations of the same 1-$km^2$ grid model results for Bellmar, and interpolations that are based on significant model errors are inherently erroneous themselves. Figures 5 and 6 in the Frakes declaration (at ¶ 46) illustrate the same model results for RLW as Figures 1 and 2 in this response, and state that the difference between the estimated pre-development adult panther habitat acreage and post-development acreage equated to a loss of 23 $km^2$ or 5,683 acres of panther habitat.

Figure 2 on the previous page (similar to Figure 6 in the declaration) illustrates that this modeling resulted in a gross overestimate of panther habitat loss, and further illustrates some odd inconsistencies in the model results. Specifically, the figure should depict far more green around the project sites to accurately capture the preservation of panther habitat. The blue arrows in Figure 2 indicate numerous areas that the model failed to identify as panther habitat in post-development (areas that are not shown in green), even though most of these areas are connected to large blocks of habitat and are readily accessible by panthers and their prey base to serve as habitat in post-development. The effects of the large 1-$km^2$ grid cell sizes are readily apparent in the area just north of the Bellmar project and in the RLW area known as Shaggy Cypress north of Oil Well Road. In both cases, the large grid cells fell below the model threshold of $P>0.338$ simply because they included too large a proportion of development. Had the model employed a more justifiable grid-cell size of 250 meters, for analyzing project effects (versus landscape-scale habitat distributions), most of these same areas would have been predicted as panther habitat by the model, and the predicted habitat loss would have been far less than modeled.

[11] Declaration of Robert Frakes, Ph.D., *Center for Biological Diversity v. EPA*, No. 21-cv-00119 (D.D.C. Dec. 4, 2023).

Figures 7 and 8 in the Frakes declaration (at ¶ 47) are interpolations of the same 1-km$^2$ grid model results for RLW, and interpolations that are based on significant model errors are inherently erroneous themselves.

The Frakes declaration (at ¶ 51) reiterates the model prediction that 5,683 acres of "prime panther breeding habitat" will be lost, and then characterizes the USFWS PHAM as an "outdated and scientifically flawed methodology" for application to this project. Frakes does not consider that i) 79 percent of the Bellmar development footprint and 51 percent of the RLW development footprint consists of agricultural fields that Onorato et al. (2011)[12] characterized as neither preferred nor avoided by panthers (i.e., not prime habitat); and ii) the PHAM required Panther Habitat Unit (PHU) compensation for impacts to those agricultural fields even though several agricultural fields within RLW were not selected as panther habitat by Frakes' own model.

Frakes states (at ¶ 51) that "mere preservation" of existing habitat does not adequately compensate for lost habitat functions. This ignores that RLW is not merely preserving panther habitat, but is also restoring and enhancing 3,294 acres of panther habitat, which includes the planting of approximately 120,000 trees and 4.5 million ground cover plants and subsequent monitoring. These efforts will improve habitat function for panthers in the restoration and enhancement areas.

With regard to panther movements related to RLW, the Frakes declaration (at ¶ 42) claims that the project will "…constrain the west side of the Camp Keis [sic] corridor…" Not only is this speculative and based largely on the flawed Frakes et al. (2015) model results and interpolations, but 24-hour GPS data from Onorato et al. (2011) clearly indicate that the habitats that panthers traverse within the Camp Keais Strand corridor will remain intact and viable in the post-development condition The Frakes declaration (at ¶¶ 47-48) cites the crude 1-km$^2$ landscape-scale model results and erroneous interpolations derived from those results as support for "predicted narrowing of the corridor." In contrast, a fine-scale examination of aerial imagery, land cover, and GPS data from Onorato et al. (2011) indicate that panthers can and will continue to use the west side of Camp Keais Strand to move between larger habitat blocks.

Also, the wildlife underpasses that will serve this area are primarily designed to allow for safe passage of panthers and other wildlife across Oil Well Road, not for the commenters' presumed narrowing of corridors or their function. The corridor will remain permeable after development has occurred, and the underpasses facilitate movement through and around the Camp Keais corridor.

***Comment: Consideration of Overall Impacts to the Florida Panther and Other Listed Species***

*The Environmental Groups expressed concerns over potential impacts to the endangered Florida panther and other state and federally threatened and endangered species. Other species specifically referenced include the Florida bonneted bat and crested caracara. Potential impacts to the Florida panther raised by the Environmental Groups included loss of primary habitat, adverse effects to panther prey base, greater incidences of panther-vehicle collisions, adverse effects on Camp Keais Strand as a panther corridor, and potential impacts to the Florida Panther National Wildlife Refuge. The Environmental Groups also expressed concern over impacts to the Primary Zone of existing crested caracara nests within the Project boundary. Additionally, the*

[12] Onorato, D. P., M. Criffield, M. Lotz, M. W. Cunningham, R. McBride, E. H. Leone, O. L. Bass, and E. C. Hellgren. 2011. Habitat selection by critically endangered Florida panthers across the diel period: implications for land management and conservation. Animal Conservation 14:196–205 ("Onorato et al. (2011)").

*Environmental Groups asked the Corps to make the permit conditions public and provide an opportunity for comment.*

**Response**

Potential impacts to listed species have been carefully considered by the applicant and will be fully addressed by the relevant agencies.[13]

The development footprint of the Project is primarily limited to existing, actively farmed agricultural fields. The development footprint was limited to these areas in order to minimize impacts to and conserve wetlands and listed species habitat. A Biological Assessment was prepared for the Project to address potential effects on species listed as threatened and endangered under the ESA. The Biological Assessment addresses the threatened Eastern indigo snake (*Drymarchon corais couperi*), threatened Audubon's crested caracara (*Polyborus plancus audubonii*), endangered Everglade snail kite (*Rostrhamus sociabilis plumbeus*), threatened wood stork (*Mycteria americana*), endangered red-cockaded woodpecker (*Picoides borealis*), endangered Florida bonneted bat (*Eumops floridanus*), and endangered Florida panther. The Biological Assessment also addresses the tri-colored bat (*Perimyotis subflavus*), a species the USFWS has proposed to list as endangered. Based on documented occurrence, on-site habitat types, and effects determination keys established by the USFWS, the Biological Assessment anticipated that the Project will not affect the red-cockaded woodpecker; the Project may affect but is not likely to adversely affect, the eastern indigo snake, wood stork, and Everglade snail kite; and the Project may affect the Florida panther, crested caracara, and tri-colored bat. The initial programmatic key determination indicated that the Project may affect and is likely to adversely affect the Florida bonneted bat, requiring technical assistance from the USFWS to analyze effects, minimize adverse effects, and confirm that jeopardy is not likely. Given the proposed conservation measures and mitigation, the Biological Assessment demonstrates that the Project is not expected to jeopardize the continued existence of any ESA-listed species.

A Listed Species Management and Human-Wildlife Coexistence Plan developed for the Project was designed to limit harmful human-wildlife interactions. The Project will establish 4,526 acres of ecologically valuable lands within the RLW Project boundary as conservation areas which will benefit wildlife, including the federally-listed species listed above. The Listed Species Management and Human-Wildlife Coexistance Plan outlines specific management plans for the following species: American alligator (*Alligator mississippiensis*), eastern indigo snake, crested caracara, wood stork and listed wading birds, Big Cypress fox squirrel (*Sciurus niger avicennia*), Florida black bear (*Ursus americanus floridanus*), Florida bonneted bat, Florida panther, and bald eagle. Of the 4,526 acres of conservation area, 4,502.78± acres will be enhanced, restored, or created from existing farm fields in accordance with the Project's Mitigation Monitoring and Maintenance Plan and will be used as habitat compensation for the Florida panther. The preservation and enhancement of these lands will benefit other species as well.

The lands designated for habitat compensation associated with the Project represent a significant regional network of conservation lands. The Project's habitat compensation area includes lands within Stewardship Sending Areas (SSAs) 14, 15, 17 and 18 that were established under the RLSP. These SSAs total over 12,000 acres of conservation lands that will preserve valuable habitat within and adjacent to Camp Keais Strand, which acts as the primary wildlife corridor in the general

[13] *Supra* note 5.

vicinity of RLW for large mammals such as the Florida panther. Strategies to minimize impacts to species that may be affected are addressed below.

**Bat Species**

For the Florida bonneted bat and tricolored bat, the Project will implement best management practices (BMPs) in accordance with the USFWS Consultation Key for the Florida bonneted bat (USFWS 2019). The following BMPs will be implemented for the Project:

i. Prior to the commencement of clearing activities, a cavity tree and roost survey will be conducted on the Project site within 30 days prior to the removal of trees, snags, or structures. When possible, structures will be removed outside the breeding season (e.g., January 1 through April 15 for the Florida bonneted bat, May through July for the tricolored bat). If evidence of use by either Florida bonneted bats or tri-colored bats is observed, the removal efforts will be discontinued, and the USFWS will be contacted on how to proceed. (BMP 1 from Consultation Key);

ii. A 250-foot buffer will be maintained around known or suspected Florida bonneted bat or tri-colored bat roosts when using heavy equipment to limit disturbance to roosting bats. (BMP 2 from Consultation Key);

iii. The creation of the Project's buffer lake system and the preservation, enhancement, restoration, and creation of 4,194 acres of on-site wetlands through the Project's wetland compensatory mitigation program will promote Florida bonneted bat and tricolored bat foraging opportunities. (BMP 5 from Consultation Key);

iv. Riparian habitat will be enhanced by the planting of native vegetation along lake shorelines (i.e., littoral zone plantings). (BMP 6 from Consultation Key);

v. Widespread application of insecticides will be avoided in areas where Florida bonneted bats and tri-colored bats are known or expected to forage or roost. (BMP 7 from Consultation Key);

vi. Native trees and shrubs will be planted within open space and buffer areas to promote insect diversity, availability, and abundance. (BMP 8 from Consultation Key);

vii. Mature trees and snags that could provide roosting habitat will be retained within the Conservation Areas. (BMP 9 from Consultation Key);

viii. The Project will implement International Dark-Sky lighting initiatives to minimize use of artificial lighting and retain natural light conditions to the greatest extent practicable. (BMP 11 from Consultation Key);

ix. The Project will implement prescribed fire as a management tool within Conservation Areas in compliance with the Prescribed Burn Plan to promote foraging habitat for the Florida bonneted bat and tri-colored bat (BMP 13 from Consultation Key).

**Caracara**

Caracaras have been observed on-site during Project field work, and a crested caracara nest was identified on-site during the 2009 nesting season crested caracara survey. However, based on the absence of caracaras in the nest area and poor condition of the nest on the last days of the survey, the caracara nest was determined to be abandoned. During the 2016 nesting season crested caracara survey, a nest was documented along Oil Well Grade Road, approximately 3,920 feet

north of the Project boundary. Additional nest monitoring conducted through February 2021 did not document any caracara nesting activity at that nest location, and the cabbage palm in which the nest was previously documented was dead.

An updated crested caracara survey was conducted from January through April 2023 for the Project. Two caracara nests were documented during that survey, including (i) one documented in a cabbage palm located on the edge of the existing agriculture operation reservoir, approximately 2 miles south of Oil Well Road and 1.20 miles east of Desoto Boulevard (Nest 1) and (ii) one documented in a cabbage palm located in a pasture approximately 1.25 miles north of Oil Well Road (Nest 2). On April 13, 2023, Nest 2 was observed to be damaged and no nesting activity was observed at the location on the final survey date of April 25, 2023. Additional monitoring of the nests through February 2024 did not document any caracara nesting activity at these nest locations.

The applicant has developed the following permit conditions to address potential impacts to crested caracara and caracara habitat.

i. Prior to conducting any clearing activities within 1,500 meters (4,920 feet) of any previously documented or newly discovered crested caracara nest site, the permittee shall conduct a survey during the crested caracara nesting season (January 1 through April 30) to determine if the documented or discovered nest is active, and if other crested caracara nests are present. The survey shall include potential nesting and foraging habitat within 4,920 feet (1,500 meters) of the identified caracara nest, including potential habitat located in land adjacent to the project site that is under the permittee's ownership or neighboring areas where access is allowed.

ii. To minimize the potential for disturbance to nesting caracaras, the permittee shall conduct land clearing activities outside the nesting season for areas that occur within the primary zone, 984 feet (300 meters), of any documented crested caracara nest site. Should it be necessary to conduct land clearing activities during the nesting season, land clearing within 984 feet (300 meters) of any nest identified during the survey referenced above will not occur until monitoring has determined the nest has either been abandoned, or chicks within the nest have fledged and left the nest site. Once the nest is empty, clearing of that primary zone and nest tree can proceed, in concert with condition iii.

iii. If construction activities are to occur within 984 feet (300 meters) of an active nest identified in the most recent nesting season, the permittee shall conduct restoration of caracara nesting and foraging habitat on a scale equal to the portion of the breeding territory that is impacted by construction activities. Restoration activities will be conducted by restoring native dry or wet prairie with scattered cabbage palms or creating improved pasture and planting scattered cabbage palms. Restoration activities will occur on existing agricultural lands located within the Project site or on agricultural lands adjacent to the project site that is under the permittee's ownership. The permittee shall contact the U.S Fish and Wildlife Service's Florida Ecological Services Office (FESO) at FW4FLESRegs@fws.gov for technical assistance prior to start of the construction activities and shall provide the location and extent of proposed restoration activities. Once restoration activities have been completed, the restored habitat will be maintained in perpetuity and managed in a state that supports use by crested caracara. The permittee shall

report the final location and extent of restored habitat to the FESO upon completion of restoration activities.

**Florida Panther**

The development footprint of the Project site is largely comprised of row crop fields. These managed monocultures provide little habitat support for panthers or panther prey (Figure 3).

**Figure 3.** Photography of typical agricultural field

Optimal habitat for panthers to hunt for prey species generally consists of clearings containing species such as forbs and grasses, interspersed in a woodland matrix. (Hewitt 2011) Hardwood hammocks and other forest cover types have also been documented as important habitat for white-tailed deer (*Odocoileus virginianus*) and other panther prey (Harlow and Jones 1965, Belden et al. 1988, Maehr 1990, Maehr et al. 1991, Maehr 1992, Comiskey et al. 1994, Dees et al. 2001).

Invasive plants in South Florida are believed to reduce the panther's prey base by significantly reducing available forage and by disrupting natural processes such as water flow and fire. Prescribed burning is believed to be important as panther prey species (e.g., deer and hogs) are attracted to burned habitats to take advantage of changes in vegetation structure and composition, and increased quality or quantity of forage (Dees et al. 2001). Conservation areas within the Project site will be maintained to contain no more than five percent cover by exotic vegetation, and the applicant has proposed to implement a prescribed burning program. Therefore, preservation provided by the Project will result in improved habitat for panther prey in areas away from Project development.

As explained in the Biological Assessment, panther telemetry points have been documented within and around the Project boundary. However, the vast majority of panther telemetry points are concentrated within native habitats and proposed conservation areas. Panther telemetry points

were recorded infrequently within the large agricultural fields where the proposed construction would occur. The preservation and enhancement activities associated with SSAs 14, 15, 17 and 18 will provide ecological benefits to wildlife, including the Florida panther. These areas have previously been identified as important habitat for large mammals, including the Florida panther, and represent a significant step towards restoring Camp Keais Strand as a large mammal wildlife corridor connecting CREW lands and Corkscrew Swamp (to the north) to the FPNWR to the south.

As part of the USFWS's review of and requests for information related to the Project, a traffic analysis was prepared by Trebilcock Consulting Solutions, PA (TCS) to assess traffic impacts on the local road network. The traffic analysis provides future traffic projections, which USFWS used to assess the potential future risk of off-site Florida panther-vehicle collisions. The traffic analysis shows that the majority (88.5%) of the projected increase in traffic volume associated with RLW occurs on the road network west of RLW, in more developed areas of Collier County including Golden Gate Estates, while only 11.5% of this projected increase in traffic occurs on the road network to the east of RLW in more rural areas of the county where panther activity is higher. Many factors outside of the control of the applicant and Corps determine whether panther-vehicle collisions are likely, including panther access to roadways, panther fencing and crossings to prevent panther access to roadways, speed limits, road design, and driver behavior. Such collisions can be virtually eliminated on roads with high speeds and traffic volumes that pass through panther habitat through use of panther fencing and crossings, as demonstrated by the Alligator Alley section of I-75. Thus, an increase in traffic does not determine whether panther-vehicle collisions will occur or at what level. Moreover, neither the applicant nor the Corps control the conditions described above that determine whether panther-vehicle collisions are likely. Nonetheless, the applicant has committed to establish a multimillion dollar fund to pay for wildlife crossings and fencing to reduce the likelihood of future panther-vehicle collisions.

At the conclusion of ESA section 7 consultation, if the USFWS finds that the proposed project may result in incidental take of listed species but not jeopardize the continued existence of such species, USFWS will specify in the biological opinion reasonable and prudent measures that USFWS considers necessary or appropriate to minimize the impacts, and will impose terms and conditions to implement such measures. *See* 50 C.F.R. § 402.14(i)(1)(ii), (iv).

The Environmental Groups have requested that the Corps provide an opportunity for public comment on such measures and conditions. But creating an additional public comment process is not warranted for a number of reasons, including the extensive opportunities provided already for public input on this project.

First, the reasonable and prudent measures, along with the terms and conditions that implement them "cannot alter the basic design, location, scope, duration, or timing of the action, may involve only minor changes…." 50 C.F.R. § 402.14(i)(2). Such provisions are not "pivotal data" or "technical studies" that the Corps will rely on to issue the 404 permit. *See Ohio Valley Environmental Coalition v. U.S. Army Corps of Engineers*, 674 F. Supp. 2d 783 (S.D. W. Va. 2009) ("pivotal data underlying the Corps' decision to issue a § 404 permit…must be entered into the administrative record and released for public review and comment before the close of comment"); *Connecticut Light & Power v. Nuclear Regulatory Comm'n*, 673 F.2d 525 (D.C. Cir. 1982) ("In order to allow for useful criticism, it is especially important for the agency to identify and make available technical studies and data that it has employed in reaching [its] decision."). The public interest is better served by focusing on the release of substantive data and analyses that

inform the permit decision, as the Corps has done here, rather than the specific conditions that are intended to operationalize compliance and provided at the conclusion of ESA section 7 consultation.

Also, there is no Corps or USFWS regulatory requirement to release such permit conditions. Agencies have established procedures for evaluating permit applications, and developing permit conditions. These procedures are designed to ensure agency compliance with statutory and regulatory requirements without necessitating public release of each step in this process.

Finally, this project has already been subject to multiple opportunities for public input beginning nearly eight years ago, when the Corps first issued public notice in July 2017. Following Florida's assumption of the 404 program, FDEP substantially reviewed the project and was close to issuing public notice when the United States District Court for the District of Columbia vacated Florida's Section 404 program. The Corps issued public notice for this project a second time on September 19, 2024 and accommodated a request to extend the comment period from 30 days to 60 days (or November 21, 2024). Given the numerous opportunities for public input, opening another comment period would create unwarranted delay without offering substantive benefit or new insights.

While transparency in the decision-making process is important, the release of reasonable and prudent measures which "may involve only minor changes" would be inconsistent with agency procedures and is not aligned with court precedent that focuses only on pivotal data and technical studies. The emphasis should remain on ensuring that the foundational data and analyses are available for public review and comment, consistent with legal standards.

***Comment: Caracara Impacts***

*The Environmental Groups claim that there is insufficient evidence to conclude that additional habitat loss and reduction to the number of breeding pairs is not likely to appreciably reduce survival and recovery of the Florida crested caracara. The comments also claim that the substantial loss of foraging habitat caused by the RLW development is likely to cause the displacement of the two breeding pairs. And due to habitat saturation, the comments assert the pair likely will not be able to shift somewhere else successfully, with the result that the habitat loss is likely to result in permanent loss of reproduction. The Environmental Groups suggest that such impacts are significant, even when taking into account the proposed mitigation.*

**Response**

The project is designed to avoid and minimize impacts to caracara through a range of protective measures including: (1) nesting season surveys prior to any clearing activities within 1,500 meters of any previously documented or newly discovered caracara nest site to determine if the nest is active and if other caracara nests are present; (2) limiting land-clearing activities within 300 meters of any documented caracara nest site to periods that (a) are outside the nesting season or (b) occur after monitoring has determined that the nest has been abandoned or chicks within the nest have fledged and left the nest site; and (3) permanent restoration of caracara nesting and foraging habitat on a scale equal to the portion of the breeding territory impacted by construction activities that occur within 300 meters of an active nest identified during the most recent nesting season.

The project includes design measures and features that benefit the caracara, including retention of over 960 acres of uplands in agricultural use that will support foraging and nesting opportunities for caracara. Additionally, where restoration of caracara habitat is required under the protective

measures described above, restoration activities will be conducted by restoring native dry or wet prairie with scattered cabbage palms or creating improved pasture and planting scattered cabbage palms. Restoration activities will occur on existing agricultural lands located within the Project site or on agricultural lands adjacent to the Project site under the applicant's ownership. The USFWS's Florida Ecological Services Office (FESO) will be contacted prior to start of the construction activities and will provide the location and extent of proposed restoration activities. Once restoration activities have been completed, the restored habitat will be maintained in perpetuity and managed in a state that supports use by crested caracara.

Potential project impacts to the caracara will be analyzed by the USFWS through formal ESA section 7 consultation. The consultation will consider all effects of the RLW project to ensure the project does not cause jeopardy to the caracara and will specify reasonable and prudent measures to minimize any harmful impacts of incidental take that may be caused by the project, as well as terms and conditions specifying how to implement the reasonable and prudent measures.

The combination of protective measures and formal consultation will avoid significant direct, indirect and cumulative impacts to caracara.

The commenters attach a declaration from Dr. Joan Morrison that logically supports a conclusion that the project is not likely to permanently impair two breeding pairs and will not result in significant cumulative effects to the Florida caracara population. Dr. Morrison coauthored a crested caracara account in *Birds of the World* (Morrison and Dwyer 2023, https://birdsoftheworld.org), the most recent synthesis of the bird's ecology which cites many of Dr. Morrison's previous publications. That account contains multiple statements regarding caracara population size, nesting habitat characterization, and land management practices that logically underscore how the effects of the RLW project on caracara will not necessarily result in the loss of two breeding pairs and are not likely to result in significant impacts to the caracara population.

Specifically, regarding the caracara population within Florida, Morrison and Dwyer (2023) state, "In Florida, increased numbers of sightings have been recorded recently north, south, and west of currently known breeding range, particularly of non-breeding birds [citing Dwyer 2010]. Limited access to private lands throughout the species' range precludes thorough surveys needed for reliable population estimation and objective evaluation of management efforts." The increase in caracara sightings coupled with limited access to most of the caracara breeding territories within Florida means that statements regarding caracara population trends and habitat suitability are the result of inference rather than direct observation or counts, and thus may underestimate the amount of suitable breeding habitat, the extent to which various habitat types are being used by breeding pairs, and actual population trends.

In Dr. Morrison's declaration (at ¶ 23) she notes, "[t]he best and most reliable estimate of population size for Florida's caracara population was recently published in Payne et al. (2023) and is based on genetic analyses. These analyses provide reliable estimates of Effective Population Size (EPS), which corresponds to the number of individuals in the population that are actually breeding thus are contributing to the population's long-term persistence (Wang et al. 2016). The estimate provided by Payne et al. (2023) for the EPS of Florida's caracara population is 565.4 individuals (95% CI: 458.2, 671.2), which represents approximately 280 breeding pairs." Thus, even if the assumption of "permanent impairment" of two breeding pairs at RLW is correct (which is debatable, as they may establish new territories), that represents 0.7 percent of the estimated

breeding population. Furthermore, the 95 percent confidence interval from Payne et al. (2024) indicates that the actual number of breeding pairs most likely ranges between 229 and 335 pairs.[14]

In addition to the breeding pairs, Morrison and Dwyer (2023) state, "[c]ounts of non-breeding birds at communal roosts were routinely >100 and occasionally >200, and for one week in August of 2008 >300 [Dwyer 2010]. In Florida, 13 communal roosts are known, and they were occupied simultaneously (J. Dwyer). A total estimate of non-breeding caracaras in Florida was precluded by lack of regular access to roosts on private lands, but 100 non-breeding birds per communal roost *may be a reasonable minimum estimate*, *providing further evidence that current total numbers may be higher than historic published estimates*." (emphasis added). This "reasonable minimum estimate" equates to a minimum estimate of 1,300 non-breeding caracara in addition to the estimated 560 breeding caracara, for a total estimated minimum population of 1,860 caracaras in the Florida population.

Disturbance of caracara habitat as a result of work authorized by the Corps permit will be limited to impacts to 118 acres of degraded wetlands and other waters, most of which are located along the edge of fields that are currently in active, large-scale agricultural use, primarily to construct road segments and water management features. Disturbance of caracara habitat caused by work authorized by the Corps permit constitutes 2.73 percent of total caracara habitat impacts resulting from the project as a whole, and reflects 0.004 percent of the approximately 2,387,201 acres of suitable caracara habitat within the overall range of the species.

From an overall project standpoint (including activities on uplands outside of Corps jurisdiction), site preparation and construction activities may cause up to two caracara pairs to adjust their territory, but these caracaras could use suitable habitat offsite, acclimate, and resume normal behavior following the first year of construction. A temporary reduction in breeding success during this limited time is expected to occur. Furthermore, the habitat loss from an overall project standpoint (4,319 acres) is a small (0.18 percent) reduction in the approximately 2,387,201 acres of suitable caracara habitat within the overall range of the species, and will be partially offset by any restoration of caracara primary zone habitat required by the Corps permit. Given the size of the Florida caracara breeding population, the large non-breeding population that can serve as a source of recruitment into the breeding population, the expansion of the known caracara breeding range (Figure 4), the restoration of nesting and foraging habitat that will be provided by the project in response to primary zone impacts, the responses of the Ave Maria caracaras to habitat changes and development (described below), and the potential for the two breeding pairs to either shift their existing territories to adjacent sites or establish new territories within the local/regional area, the Corps can rationally conclude that the effects of the project, particularly with required avoidance and mitigation, will not significantly affect the Florida caracara population.

Comments about long-term population persistence and habitat saturation are addressed in the following comments and responses.

**Comment: *Caracara Population***

*The Environmental Groups also suggest that there is insufficient evidence to conclude that additional habitat loss and reduction to the number of breeding pairs is not likely to appreciably*

[14] In her declaration. Dr. Morrison cited an advance access publication of Payne et al. (2004). See Journal of Heredity, 2024, 115, 45–56 https://doi.org/10.1093/jhered/esad057 Advance access publication 14 October 2023.

*reduce survival and recovery of the Florida crested caracara. According to the Environmental Groups, available scientific information indicates that for "closed" populations (i.e. populations that cannot grow due to habitat saturation) of relatively small population size, isolated, and already known to have reduced genetic diversity, such as the Florida crested caracara, there is substantial reason to believe that continued habitat loss that reduces the number of breeding pairs likely appreciably diminishes survival and recovery.*

**Response:**

Absent studies of long-term persistence, the evidence does not support a conclusion that the effect of the action would appreciably reduce survival and recovery of the Florida crested caracara. In fact, it is estimated that 560 breeding caracara (280 pairs) and an estimated minimum of 1,300 non-breeding caracara currently inhabit Florida. Morrison and Dwyer (2023) state the following with regard to population viability:

> Preliminary population viability analysis indicates the Florida population is probably stable at present [Root and Barnes 2007], particularly in light of new evidence indicating high productivity and nesting density in some areas [Morrison 1999[15]], and high numbers of floaters available to replace territory holders that die (JFD). Models also indicated that the most important demographic variable impacting viability is adult survival, and that the population is sensitive to even modest levels of habitat loss [Root and Barnes 2007]. Little change to habitat has occurred in the core area of the species' Florida range from that shown by Howell [1932[16]]; but in some areas the range has contracted and fragmented. Caution is warranted in evaluating trends, because counts are hampered by limited access to all areas of suitable habitat and by effects of birds' terrestrial behavior on their detectability.

It would be speculative to conclude that the limited habitat loss and potential territorial shift of two breeding pairs would appreciably reduce survival and recovery of caracara, especially in light of the protective and beneficial project measures described above. Furthermore, Dr. Morrison documented the expansion of the caracara breeding range into Seminole County and noted new caracara sightings in numerous counties outside of the known breeding range (Morrison and Dwyer, 2023) (see Figure 4 below).

The declaration of Dr. Morrison explains at length the concept of "closed" populations and habitat saturation, with respect to the Florida caracara population. However, the comment above regarding habitat loss and much of Dr. Morrison's explanations are built upon chains of assumptions and inferences that result in speculative conclusions.

There is an unstated foundational assumption underpinning all the arguments that the loss of caracara habitat within a breeding territory equates to a reduction in the number of breeding pairs, which may subsequently diminish survival and recovery. The unstated assumption is that there currently exists a finite, static acreage of Florida caracara habitat capable of supporting breeding pairs, and that every permanent conversion of that habitat necessarily reduces the acreage of suitable breeding habitat and the number of caracara breeding pairs. In fact, there are multiple reasons why that basic assumption fails to adequately characterize actual conditions and factors affecting the total extent and number of caracara breeding territories in any given year over time.

[15] Morrison, J. L. 1999. Breeding biology and productivity of Florida's Crested Caracaras. Condor 101 (3):505-517.

[16] Howell, A. H. (1932). Florida Bird Life. Coward-McCann, New York, NY, USA.

The primary determinants of nest site suitability for Florida caracaras include not only specific types of land use/land cover (e.g., pasture; prairie), but specific habitat conditions including those resulting from active, ongoing land management practices. Morrison (2007)[17] stated,

> Here, I describe nest sites of breeding pairs of caracaras from 76 different breeding areas in south-central Florida. Most nest sites found were on privately owned cattle ranches. Most nests were built in cabbage palms, and *nest trees typically occurred in short-stature pasture or grassland habitat.* (emphases added)

The caracara literature has long noted the strong association between open, short-stature vegetation and caracara breeding habitat, and the conservation value of large private ranches and cattle pastures (Morrison and Humphrey 2001; Morrison and Dwyer 2023). However, a lack of ongoing grazing, mowing, or prescribed fire that maintains large open areas in short-stature vegetation can naturally convert suitable caracara breeding habitat into unsuitable habitat for as long as the overgrown vegetation exists on the site. As Morrison and Dwyer (2023) noted, "Caracaras are no longer observed regularly in areas following removal of cattle or fire suppression, both of which result in thick growth of tall, weedy, and shrub vegetation."

The key point is that the actual amount of suitable habitat for breeding territories, and the number of caracara breeding territories existing in Florida, at any given time is contingent on actual conditions, including those associated with land management practices that maintain pastures, dry prairies, wet prairies and other suitable land cover in short-stature vegetation with scattered cabbage palms as potential nest trees. The total number of caracara breeding territories in any given year therefore reflect the existing territories from the prior year, along with the net changes due to losses from permanent habitat conversions, losses due to lack of active land management (grazing, mowing, prescribed burning), and breeding territory *additions* due to reinitiation of land management practices on overgrown habitat (e.g., converting fallow agricultural fields to pastures; mowing or burning overgrown pastures).

Rural property owners with potential caracara breeding habitat routinely take fields and pastures in and out of crop/cattle production due to economic factors such as crop or beef market prices, demand for agricultural leases, available credit, etc. A review of aerial imagery within the caracara's range reveals a constantly changing agricultural production landscape that affects the net change in available caracara breeding territories over time. Dr. Morrison's declaration noted (at ¶ 44), "FWS's effects conclusion for the Bellmar project acknowledged that 'all suitable caracara habitat is believed to be saturated'" and the rapid occupation of vacated breeding territories by new breeding pairs supports this conclusion. But habitat saturation and some degree of permanent habitat conversion do not necessarily imply a net loss of breeding territories; increased acreages of actively managed pastures and caracara foraging habitats may offset losses or create a net addition of breeding territories in some years.

Dr. Morrison's declaration (at ¶ 42) states that habitat conversion can result in multiple outcomes if and when breeding caracaras are displaced, including a move to habitats adjacent to the site, or travel of some distance from the site to establish a new territory. These responses are consistent with what has been observed at Ave Maria, just east of RLW, where two breeding pairs exist adjacent to and actually within the developed areas, and a third established a territory just north of

[17] Morrison, J. L. 2007. Characteristics of nest sites used by Crested Caracaras in south-central Florida. Florida Field Naturalist 35 (1):1-8.

the development. The declaration notes (at ¶ 40) that there are agricultural areas and wetlands that provide foraging habitat for those pairs. The pairs at RLW exist across Camp Keais Strand from Ave Maria and have extensive wetlands for foraging even post-development, and agricultural areas within the local area. It is entirely possible that the RLW breeding pairs will habituate to their changing environment just as the Ave Maria caracaras have demonstrated.

Furthermore, the declaration states (at ¶ 57) that "…displacement of the breeding pairs from RLW is likely to have a 'domino effect' on other breeding pairs…," but this statement does not consider a move to habitat adjacent to the project site or travel of some distance to establish a new territory as described in the previous paragraph. The caracara pairs at Ave Maria did not create a "domino effect" on other breeding pairs due to project construction, and this observed response should carry as much or more weight than speculation that a "domino effect" could occur.

The contention that the action will result in significant cumulative effects rests upon on tenuous chain of logic that i) the breeding pairs at RLW will not persist in the local area (contradicted by the response of caracara pairs at Ave Maria); ii) if displaced, the pairs will have a "domino effect" and displace other breeding pairs (contradicted by Dr. Morrison's declaration at ¶ 42 that the pairs may habituate or travel to establish new territories); and iii) if the "domino effect" occurred it would somehow result in a significant cumulative effect (contradicted by the fact that there are an estimated 280 breeding pairs within more than 2 million acres of habitat).

The statement that the Florida caracara population is a "closed population" due to habitat saturation must be evaluated in light of potential expansions in the range of the species and/or increased detection of breeding pairs in Florida. Figure 4 depicts the changes in the estimated caracara range from Morrison (2001)[18] and Morrison (2006),[19] with spot symbols added to the latter from descriptions in Morrison and Dwyer (2023). The figure illustrates that the known breeding range of caracara in Florida has expanded over the past 25 years, with caracara breeding confirmed as far north as Seminole County by Dr. Morrison herself (Figure 4, red "X"), that sightings exist in multiple counties surrounding the known range, and that sightings have occurred in outlying counties such as Levy County (Figure 4; northernmost green "X") and Okaloosa County in the western panhandle of Florida. These observations signify that with an expanded range the acreage of caracara habitat has been underestimated, and that caracara population estimates and trends may not have captured these expansions to date.

Finally, the commenters' statements about potential cumulative effects are speculative, and scientific determinations of effects should not be based on speculation or supposition. As noted above, potential jeopardy to the continued existence of the species is not a substantial issue because the USFWS will ensure against jeopardy through ESA section 7 consultation, and in fact Dr. Morrison notes that the current population is stable. Indeed, the project will not only include appropriate protective measures for the caracara, but will provide important benefits to the caracara through preservation and, where required, restoration of habitat valuable to the caracara.

[18] Morrison, J. L. 2001. Recommended management practices and survey protocols for Audubon's Crested Caracara (Caracara cheriway audubonii) in Florida. Technical report no. 18. Florida Fish and Wildlife Conservation Commission.

[19] Morrison, J. L. 2006. The Crested Caracara in the changing grasslands of Florida. *In* Land of fire and water: The Florida dry prairie ecosystem. Sebring, Florida: Proceedings of the Florida Dry Prairie Conference.

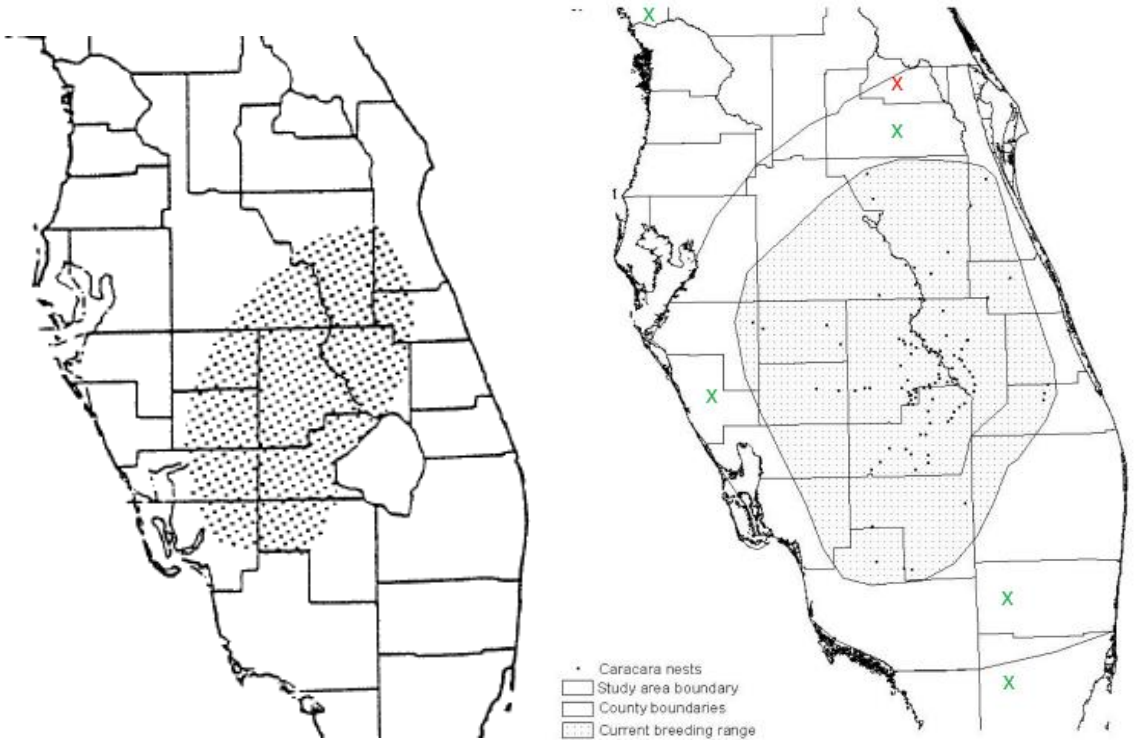


**Figure 4.** Comparison of known breeding range from Morrison (2001; left figure), Morrison (2006; right figure). Morrison and Dwyer (2023) reported confirmed caracara breeding in Seminole County (red "X" in right figure), which expands the known caracara breeding territory northward by two counties. Green "X" locations indicate counties where caracara sightings have been recorded but breeding has not been confirmed (Morrison and Dwyer 2023).

***Comment: Habitat Fragmentation***

*The Environmental Groups expressed concern about habitat fragmentation resulting from development of the Project and surrounding planned developments. The comments also focused on the addition of new roads and an increase in human activity in the area and how those factors may impact listed species movement through the existing north-south wildlife corridor.*

**Response**

The Project was specifically designed to minimize fragmentation impacts. The construction footprint of the Project is concentrated within the western portion of the Project site, near existing development and primarily on previously cleared lands that are currently being used for large-scale agricultural operations. The Project was designed in accordance with the RLSP, and as such, impacts were limited to areas where natural resource values are low. Environmentally sensitive lands with higher natural resource value covering large interconnected areas that adjoin habitat on state and federal lands will be preserved and established as SSAs as part of the Project, thereby avoiding fragmentation of areas with higher value natural resources. Participation in the RLSP is voluntary, however, and without the Project the site could be developed under the County's base zoning at a density of one residence per five acres, which would result in significant habitat fragmentation similar to the adjacent Golden Gate Estates.

Additionally, the preservation and enhancement activities associated with the Project's conservation areas will provide ecological benefits to wildlife, including the Florida panther. These areas have been identified as important habitat for large mammals, including the Florida panther, and their preservation and enhancement by the Project represent a significant step toward restoring Camp Keais Strand as a large mammal wildlife corridor connecting CREW lands and Corkscrew Swamp to the north and the FPNWR to the south. Surrounding planned developments have also worked in conjunction with various stakeholders to enhance and maintain these large mammal corridors.

Habitat connectivity between the preservation areas will be maintained through the construction of five wildlife crossings, including four within the Project site and one under a County road in the geographic region where the Project is located, thereby further minimizing fragmentation impacts. Each of these five crossings will be designed to accommodate large mammals and will be sited to maintain dispersal corridors and connections to existing conservation areas and preserves.

Rural Lands West is designed to significantly improve preserved wetlands by routing surface water flows from the proposed development areas through stormwater management facilities to those wetlands, resulting in more consistent and ecologically beneficial water levels, as required by the South Florida Water Management District (SFWMD) permit issued for the project. Treated stormwater will be routed from stormwater management facilities into on-site wetlands and sheet flow through the wetlands will convey surface flows to off-site receiving wetlands. Control elevations for the stormwater management system were established based on the biological indicator elevations of wetland water levels. These design features will ensure that the hydroperiod within on-site preserved wetlands and off-site receiving wetlands are improved and maintained as required by the SFWMD permit.

***Comment: Alternative Project Sites***

*The Environmental Groups' comments suggest that the applicant could further avoid and minimize Project-related impacts, and that the Project's Alternatives Analysis is inadequate.*

**Response**

The applicant has prepared a detailed analysis of alternatives clearly demonstrating that the Preferred Alternative (RLW) is the least environmentally damaging practicable alternative. The applicant analyzed alternative Project locations for impacts to the aquatic ecosystem and impacts on other environmental resources. The applicant also analyzed the practicability of such alternatives, including availability, cost, and their ability to meet the overall Project purpose. As part of the extensive analysis involved in the applicant's proposal of this Project, alternatives in terms of site configuration, the location and number of wildlife corridors, and no-action options were thoroughly evaluated. The applicant also analyzed a number of alternative configurations within the site and greatly reduced overall impacts to aquatic ecosystems. The impacts that will occur as a result of Project construction primarily involve aquatic areas that are already degraded or have minimal or low aquatic functions.

Collier County's Rural Lands Stewardship Program (RLSP) provides a planning and zoning overlay approved by Collier County in 2002 covering approximately 185,000 acres of land in eastern Collier County. The landowners have the right to develop this land at 1 home per 5 acres. To avoid sprawl-type development, the RLSP incentivizes the protection of 130,000 acres of the area that contain higher natural resource values, while concentrating development of "towns" and

"villages" within remaining areas that have the lowest environmental values, such as lands used for harvesting row crops and citrus. The result is over 3 acres of high-quality environmental lands protected in perpetuity for every acre of lower environmental value lands developed.

Under the Collier County Land Development Code (LDC), a "village" is comprised of primarily residential neighborhoods with a diversity of housing types and includes a mixed-use village center to serve as the focal point for the community's support services and facilities. Section 4.08.01.UU, LDC. A village may not be less than 300 acres or more than 1,500 acres in size. Towns are the largest and most diverse SRA form, with a full range of housing types and mix of uses. Towns have urban-level services and infrastructure to support development that is compact, mixed-use, and human-scale and provide a balance of land uses to reduce automobile trips and increase livability. *Id.* A town may not be less than 1,500 acres or more than 5,000 acres in size. *Id.*

As described in the May 2024 Alternative Sites Analysis for RLW, the applicant previously identified the major components of the RLW project as three "villages" under the RLSP. Collier County approved two of the three villages and designated them as Rivergrass Village and Longwater Village on January 28, 2020 and June 8, 2021, respectively. Subsequently, in order to advance the objectives of the RLSP, Collier County requested that the applicant file an amendment to the Longwater Village Stewardship Receiving Area (SRA) to create a "town SRA," which would allow the area that was Longwater Village together with additional land being designated as affordable housing, town core, town center, business parks, and a community park to be considered a single "town" as defined by the RLSP. Collier Enterprises filed the SRA amendment on January 27, 2022, and the County approved the Longwater Village SRA amendment to create a town SRA (the Town of Big Cypress) on June 27, 2023. The footprint of the Town of Big Cypress SRA overlays the Longwater Village footprint and the northern tip of Bellmar, a separate project proposed by the applicant south of RLW.[20]

The applicant plans to construct RLW as a master-planned, mixed-use community in a rural setting that promotes harmony with nature and celebrates environmental stewardship. RLW will provide interconnected residential neighborhoods, a community park, recreational amenities, commercial centers, business park, schools, lakes, walking and biking trails, drainage management systems, associated infrastructure, and buffer areas separating the community from preserved areas, all in a setting that reflects the conservation of natural and rural values. RLW will be of sufficient size to include three villages and a business park (or a "town" and two villages occupying the same footprint, as described above). To accomplish this goal, the project integrates natural systems into the master plan and is contoured around and permanently preserves valuable wetlands and wildlife habitat. The project requires at least 4,000 acres of contiguous land to accommodate these components and purposes. While sufficient conservation land of 4,000 acres or more is also required to offset the impacts of the project, the applicant did not limit its review of potential

[20] Importantly, the SRA amendment is a County-level political designation and does not change the footprint or impacts of the RLW or Bellmar projects it overlays, nor does it change the purpose and need for (or independent utility of) either development. Collier Enterprises submitted the original RLW 404 application to the Corps four years before it submitted the Bellmar application. The projects are physically and legally separated based on the location of existing parcel boundaries, have separate planning and permit review histories, have undergone discrete County RLSP approval and project modification processes, and are subject to separate contracts with separate builders. The builders with contracts to develop RLW are Lennar, Taylor Morrison and Forestar. The builders with contracts to develop Bellmar are GL Homes and Lennar. The Bellmar and RLW projects would each proceed without the other, even if further adjustments to RLSP designations were necessary.

alternatives to areas with 8,000 acres or more because the applicant already owns land that can be used for that purpose, as recognized by the RLSP.

Therefore, to achieve the overall Project purpose and need, parcels located in rural eastern Collier County with a minimum of approximately 4,000 contiguous acres were identified. These areas were then assessed based on screening criteria to determine whether these represented potential alternative sites. The parcels were initially screened for the presence of protected natural resources, including wetlands and listed species habitat, which would preclude participation in Collier County's RLSP. Following this initial screening effort, environmental and practicability criteria with respect to the remaining land areas (e.g., impacts to the aquatic ecosystem and availability) were assessed. Property ownership and availability and the known presence of water retention basins were also considerations in this analysis.

The Project has been extensively designed and redesigned to avoid and minimize impacts to the extent practicable consistent with the project purpose. There are no practicable alternatives to the selected site and activities that do not involve special aquatic sites. The presumptions of available practicable alternatives have been overcome because the Alternatives Sites Analysis for the Project clearly demonstrates that the proposed fill is the least environmentally damaging practicable alternative.

***Comment: Avoidance and Minimization of Impacts to Wetlands***

*The Environmental Groups suggest that the Project does not adequately avoid and minimize impacts to panther habitat. '*

**Response**

The Project's adherence to the RLSP helps ensure that impacts are minimized consistent with the design and purpose of the RLSP. The RLSP was designed to direct and concentrate development of communities away from areas of higher natural resource value and to use open areas of less natural resource value. The Project will preserve over 12,000 acres of environmentally sensitive lands and wildlife habitat within SSAs 14, 15, 17 and 18 under the RLSP. These activities are anticipated to have an ecologically significant regional benefit and more than compensate for impacts associated with the Project.

In addition, the applicant considered design alternatives for the Project to further minimize impacts to wetlands. The Project site plan was designed to utilize existing agriculture fields to avoid and minimize impacts to wetlands, and to ensure that unavoidable wetland impacts are primarily to wetlands with relatively low functions and values. Project impacts to wetlands are limited primarily to impacts associated with the construction of road crossings over wetlands and surface water management facilities constructed in proximity to existing waters. These wetland impacts are mostly limited to low quality wetlands that are part of and/or immediately surround agricultural operations. As the site plan is currently designed, the Project preserves 91 percent (4,101 acres) of the wetlands within the project site. Of these impacts, the majority consist of disturbed wetland habitats or habitats comprised of 50 percent or higher non-native species. Nonetheless, these impacts will be more than fully offset by project mitigation as further discussed below.

SFWMD's issuance of the Conceptual Environmental Resource Permit (ERP) for the Project serves as State Water Quality Certification, demonstrating that there will not be cumulative or unmitigated direct and secondary impacts to wetlands, hydrology, or surface waters.

***Comment: Mitigation of Impacts***

*The Environmental Groups question whether the proposed mitigation measures are sufficient to offset impacts.*

**Response**

The Project will result in an increase in wetland functions in the preserved wetlands with the implementation of the Project's mitigation program. A Uniform Mitigation Assessment Method (UMAM) analysis was conducted for the Project to quantitatively evaluate the current functional value of the onsite wetlands. In addition, UMAM scores were used to determine the lift in wetland functions from implementing the on-site mitigation programs. According to the UMAM analysis, the Project will result in the loss of 142.5 functional units. The lift provided by the Project's wetland preservation, enhancement and restoration, and upland preservation will result in a gain of 306.07 functional units. The result is a surplus of 163.57 functional units or over a 2:1 improvement of wetland functions and values for the Project relative to current conditions. As such the Project's proposed mitigation program will more than offset the loss of wetland functions from the proposed impacts.

To compensate for impacts to potential listed species habitat, the conservation areas will be managed for listed species based on habitat type and current listed species utilization. Target listed species include the American alligator, Eastern indigo snake, crested caracara, state-listed wading birds, wood stork, Big Cypress fox squirrel, Florida black bear, and Florida panther. The on-site wetland mitigation and the creation of the Project's lake buffers and stormwater management ponds, with associated littoral zones and native plantings, will increase the potential foraging habitat for state-listed wading birds, wood stork, and the Everglade snail kite. In addition, the applicant has committed to following guidelines established by the USFWS for the protection of the Eastern indigo snake (USFWS 2013).

The preservation and restoration activities associated with SSAs 14, 15, 17 and 18 will provide ecological benefits to wildlife, including the Florida panther. These areas have previously been identified as important habitat for panther and other large mammals, and their preservation and restoration represent a significant step towards restoring Camp Keais Strand as a large mammal wildlife corridor connecting CREW lands and Corkscrew Swamp to the north, with the FPNWR to the south.

Furthermore, the Project will follow the tenets of the ECMSHCP, and the obligation to follow those tenets will be incorporated as conditions of the Corps 404 permit. The Project is also pursuing approval at the local level through the Collier County RLSP and this approval will be contingent upon proper mitigation of the proposed impacts. Therefore, the permitting process, which involves consultation with USFWS and with various state and local agencies, provides reasonable assurances that sufficient habitat compensation will be provided.

A Project-specific panther habitat compensation analysis was conducted. Conservation areas internal to the development footprint were considered impacted in this analysis as they will be managed to deter use by large mammals and panther prey species. The results of the analysis showed that, as proposed, the Project's mitigation plan more than offsets the development impacts per the USFWS Panther Compensation Calculator. Specifically, the Project will generate over 4,500 PHUs above what is required to compensate for the Project's impacts to panther habitat.

A wood stork foraging habitat assessment was also conducted for the Project using the methodology established by the USFWS in its July 12, 2012 Wood Stork Foraging Habitat

Assessment Methodology. The analysis estimates the potential loss of forage biomass available to wood storks resulting from unavoidable wetland impacts associated with the proposed Project. The analysis also estimates the potential increase of forage biomass available to wood storks that will occur as a result of the wetland mitigation activities at the Project site. Based on this analysis, unavoidable wetland impacts from development activities will result in the loss of 219.38± kilograms of forage biomass potentially vulnerable to predation by wood storks. The proposed wetland mitigation activities within the wetland preserves on the Project site will result in a net increase of 2,340.34 kilograms of forage biomass. Based upon the USFWS methodology, the proposed mitigation activities will provide over 10 times more prey biomass than is lost as a result of the proposed Project.

The mitigation described above will be incorporated as enforceable conditions of the Corps 404 permit, ensuring ESA compliance. In addition, the conservation areas for the Project will be placed under a conservation easement granted to the SFWMD with third-party enforcement rights to USFWS. The conservation easement will ensure that the conservation areas will remain in a natural state in perpetuity and will not be disturbed by dredging, filling, land clearing, agricultural activities, or other construction work, except those activities described in the mitigation plan. The conservation easement will be recorded in phases per the Project's phased mitigation areas. To ensure the applicant fulfills this obligation, one of the success criteria for the mitigation areas is that the conservation easement be recorded.

***Comment: Indirect and Cumulative Impacts***

*The Environmental Groups suggest that the Project will have unacceptable direct, indirect, and cumulative impacts on endangered and threatened species, wetlands, and other natural resources. Specifically, the Environmental Groups ask the agencies to consider the impact of the Project with the cumulative effects of other reasonably foreseeable development that will be authorized under the State 404 program and will affect listed species and habitats in the areas affected by the Project.*

**Response**

A Cumulative Impact Assessment was conducted and submitted to the FDEP. The assessment demonstrates that wetland acreages within the Study Area have remained relatively stable since 1992 with 80 percent of the wetlands within the study area under conservation status. The wetland impacts proposed by the Project represent only thirty-three one-hundredths of one percent (0.33 percent) of the total wetland acreage in the study area. By contrast, the wetland compensatory mitigation for the Project represents 5.25 percent of the total wetland acreage within the study area, and provides higher functions and values than the impacted areas. As a result of the mitigation, including the lift in functions and values provided by the mitigation, the incremental effect of the proposed discharges of dredged or fill material to jurisdictional wetlands, along with other past, present, and reasonably foreseeable discharges or actions, will not result in any significant cumulative impacts upon the aquatic ecosystem or other environmental resources of concern within the study area.

Impacts proposed under the RLW development plan are not likely to accumulate with other projects in a way that causes significant adverse impacts to listed species. Most of the proposed impacts are to wetlands that are heavily disturbed by the surrounding agriculture operation and do not serve as highly valuable parts of the broader ecosystems. Moreover, the accumulation of benefits provided by RLW and other similar projects, such as those proposed under the RLSP, are

expected to create a net increase in ecological function within the region. Extensive enhancement and preservation efforts proposed by these landscape-scale developments are expected to provide an overall improvement to habitat quality within the study area.

In addition, the Biological Assessment analyzes potential cumulative effects on each federally-listed species, based on the incremental impacts of the Project when added to other past, present and reasonably foreseeable state or private activities, not including future federal activities, which are reasonably certain to occur within the action area. This analysis compiled state ERP and local Planned Unit Development (PUD) data to assess cumulative effects on federally-listed species. For the Florida panther, USFWS defined the action area to include the portion of the current panther range in which panthers may be directly or indirectly affected by the proposed action within a 25-mile radius of the Project site. Exhibit 41 to the Biological Assessment includes a map depicting the projects included within the cumulative effects analysis for the Florida panther (i.e., ERPs and PUDs within a 25-mile radius of the Project and within the Panther Focus Area from 2020 through 2023).

Between October 2020 and October 2023, a total of 109 ERP permits were issued in the action area. Of these projects, 78 could be expected to be subject to development without requiring a federal permit to impact wetlands and the associated ESA review. These 78 projects affect approximately 3,372.89 acres and impact 0.59± acre of wetlands. The average over the three-year review period is 1,124.30± acres per year. This annual loss represents 1.80 percent of a male panther's average home range (62,542± acres) and 3.87 percent of a female panther's average home range (29,059± acres).

In addition to the ERP projects, vacant lands in Northern Golden Gate Estates are estimated to be developed at a rate of 417 lots, or 1,740± acres, each year. Vacant lands within the area of Lehigh Acres are estimated to be developed at a rate of 1,764 lots, affecting 441± acres, a year. The combined annual level of development (1,124.30 + 1,740 + 441= 3,305.3± acres) represented in the cumulative effects analysis accounts for future actions not subject to federal ESA review. This level of projected future development represents 11.4 percent of a female panther's average home range and 5.3 percent of a male panther's average home range.

The areas where development is anticipated are generally comprised of disturbed vegetative communities and row crops or are located in partially developed areas. Efforts to mitigate or offset these impacts will be accomplished through implementation of conservation measures as outlined in the USFWS Recovery Plan for the panther, including public acquisition of lands that benefit the panther, the establishment of a panther conservation banking program, and the installation of wildlife crossings and underpasses.

Overall, the incremental impacts of Rural Lands West are not expected to be significant in the context of other past, present, and reasonably foreseeable regional projects. Impacts from Rural Lands West to approximately 262 acres of mostly lower value wetlands will be more than fully offset by both the enhancement and permanent preservation of over 4,000 acres of higher value, on-site wetlands. The combination of confining impacts to already-disturbed areas along the fringes of existing agricultural areas, and significant compensatory mitigation (including preservation and enhancement of internal wetlands) ensures that no significant cumulative effects will occur.

Based on the UMAM analysis for Rural Lands West, the Project will result in the loss of 142.5 functional units. The lift provided by the Project's wetland preservation, enhancement and

restoration, and upland preservation will result in a gain of 306.07 functional units, resulting in a surplus of 163.57 functional units. The increase (or functional lift) the project will provide is consistent with the Corps policy of no net loss of wetland functions and values. The mitigation provided for impacts associated with Rural Lands West and the implementation of conservation measures for listed species will result in a net positive increase in habitat value for federally-listed species in the region. The project is consistent with landscape-scale planning that benefits listed species as reflected in Collier County's RLSP. Landscape-level planning results in preservation of vital corridors connecting vast public conservation lands in the area surrounding the project site and beyond. Thus, based on the best data available, the incremental impact of the project on federally-listed species, including the Florida panther, will not be significant. This conclusion is also supported by the USFWS Biological Opinion.

The Corps has received applications for section 404 permits and issued public notices for other projects likely to undergo ESA section 7 consultation in the region where Rural Lands West is located, including: Bellmar, Troyer Mine, Kingston, Brightshore, Immokalee Rural Village, Corkscrew Florida Farms Development, and Horse Trials. A review of these applications indicates that the projects associated with the permit applications have each been designed to minimize impacts to environmentally sensitive lands while preserving those that are the most ecologically valuable, which are comprised of native vegetation communities that include the higher quality wetlands and listed species habitat. The proposed site plan for each of these eight projects limits the proposed development footprint primarily to existing farm fields, including row crops and citrus groves that have been in intensive agricultural use for decades. An aerial analysis demonstrates that a combined total of 90 percent of the proposed development footprints for these eight projects is located within existing agricultural fields, and that only 10 percent will impact native vegetation communities.

Cumulatively, the projects associated with Rural Lands West and the other seven permit applications will impact only seven percent of the total wetlands located within their site boundaries. The remaining 93 percent of wetlands – totaling 9,820 acres, all of which are located on privately-owned lands – will be preserved (and many will be enhanced). The preserved wetlands will be protected permanently through conservation easements granted to local, state and federal agencies, preluding the possibility of impacts resulting from future development. Wetland enhancements will include removal of exotic vegetation and restoration of native vegetation and flows. Within Collier County, the areas identified for preservation are consistent with the landscape-scale protection of higher-value wetland systems provided under the RLSP. These eight projects not only avoid impacts to over 90 percent of the wetlands within their site boundaries but produce a net increase in total wetland acreage. These eight projects propose impacts (discharges of dredged or fill material) to a combined total of 735 acres of wetlands. Correspondingly, implementation of county, state, and federal mitigation and conservation measures by these projects will create 1,486 acres of new wetlands from existing farm fields (i.e. row crops and citrus groves).

The creation of 1,486 acres of new wetlands will entail cessation of intensive agricultural operations (i.e. row crops and citrus groves), restoration of lands cleared and ditched for agriculture by contouring the lands to match the surrounding topography, establishment of regular water flows to preserve wetland hydrology, use of appropriate soils to support wetland vegetation and hydrology, removal of exotic vegetation, and planting and maintenance of native vegetation. This

work will result in a net increase of 751 acres of valuable wetlands that will serve important water filtration and quality functions and provide valuable habitat for protected and prey species. From a cumulative wetland function standpoint, the projects are expected to be consistent with the Corps policy of no net loss of wetland functions and values; in fact, they will produce a net increase in wetland functions and values. Specifically, the anticipated improvement in wetland functions and values resulting from wetland preservation, enhancement and creation more than offset any loss of wetland functions and values resulting from permitted impacts to wetlands that are generally limited to lower quality wetlands within or at the edges of agricultural lands.

With respect to cumulative impacts to habitat of panthers and other listed species, the eight projects identified above are correspondingly designed to focus permitted work on already-disturbed lands that have relatively low (if any) habitat value, and to preserve, enhance and restore higher value habitat located on privately-owned land that is zoned for and open to development absent such preservation. In particular, consistent with Collier County's RLSP, the areas identified for preservation provide regional, landscape-level protection of interconnected areas of higher value habitat, including areas that serve as important wildlife dispersal corridors. These dispersal corridors can be important to assisting the panther, for example, in expanding its range northward through the state and thereby increasing its population. Figures 5 and 6 below show telemetry points where radio-collared panthers were recorded between 1982 and 2022 (the last year for which telemetry data is available),[21] illustrating the use panthers make of the preserved areas rather than the agricultural lands identified for development by the eight projects consistent with the RLSP.

[21] Pursuant to communication with the FWCC in August 2023, the FWCC no longer releases panther telemetry data to the public per Florida Statute 379.1026.

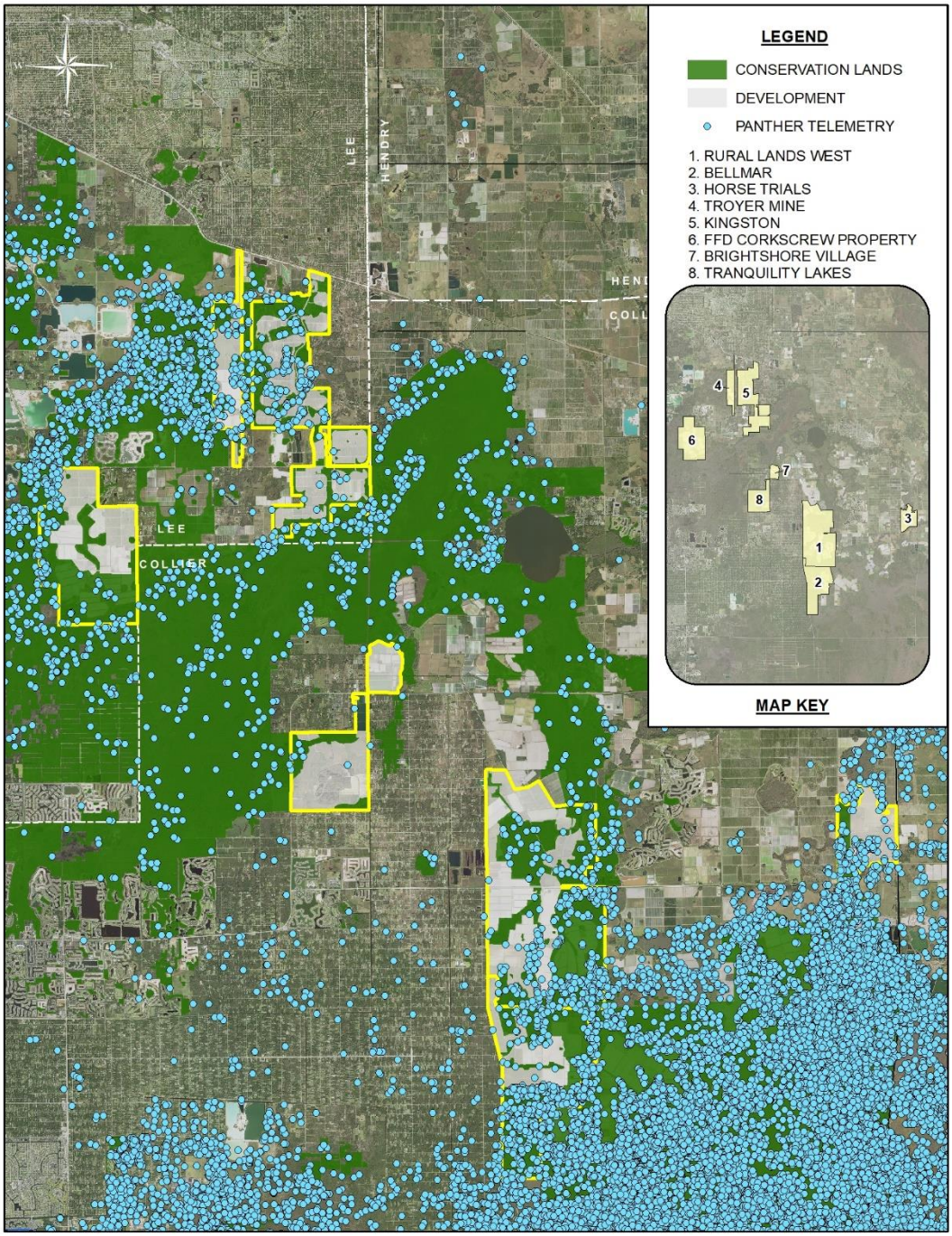


**Figure 5.** Eight Corps permit applications currently under review (Rural Lands West, Bellmar, Troyer Mine, Kingston, Brightshore, Immokalee Rural Village, Corkscrew Florida Farms Development, and Horse Trials) with their associated development and conservation footprints as well as adjacent conservation lands. Blue dots represent panther telemetry recorded from 1982 to 2022.

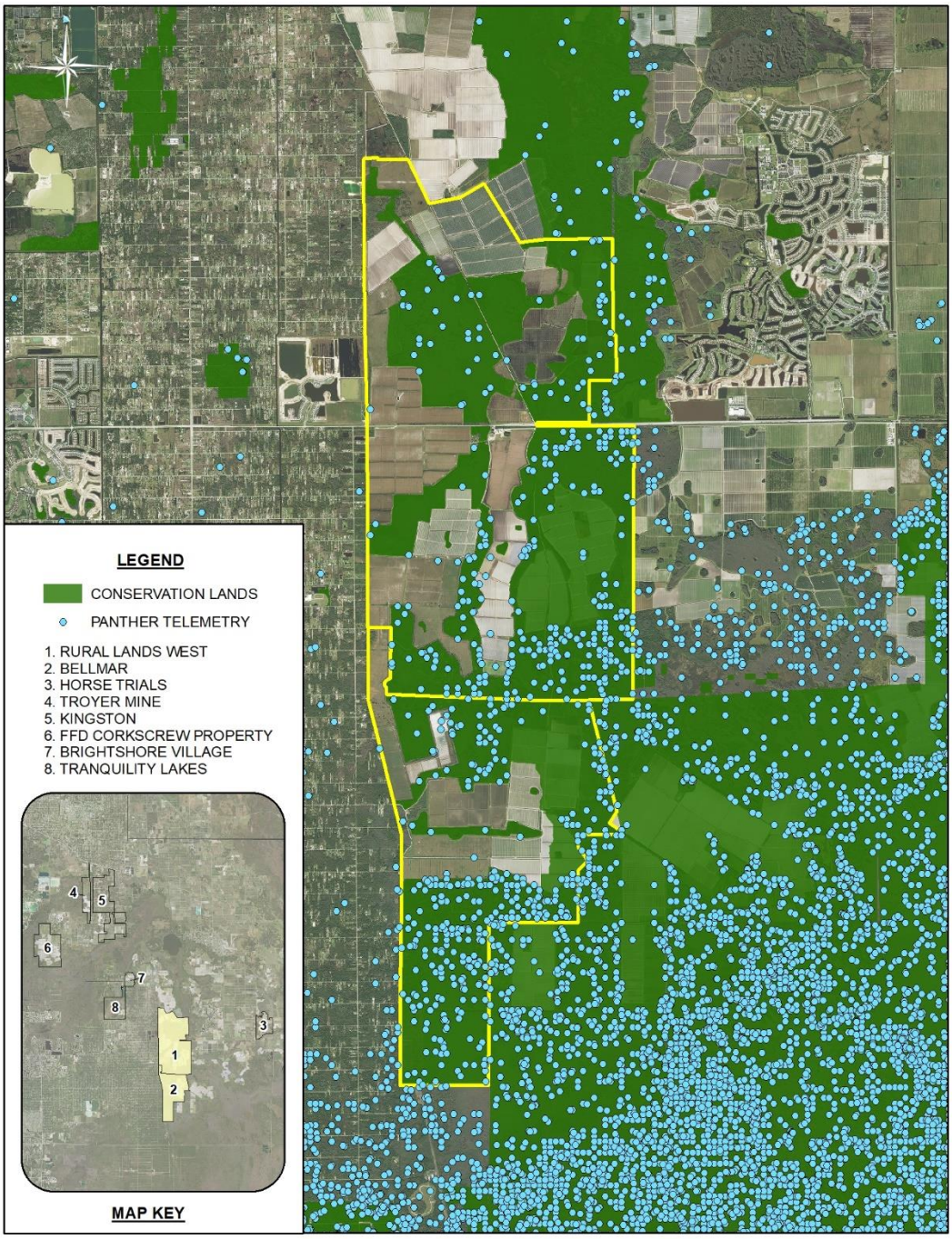


**Figure 6.** Rural Lands West and Bellmar Corps application boundaries with Conservation Lands. Blue dots represent panther telemetry recorded from 1982 to 2022.

The Corps previously considered potential future development patterns in Southwest Florida in its Environmental Impact Statement on Improving the Regulatory Process in Southwest Florida (SWFEIS). The SWFEIS identified approximately 386,000 acres of preservation lands within the 1,556 square mile study area at the time of the study (38.8 percent of the study area). The projects

associated with these eight permit applications all fall within the study area boundaries, and an analysis of current land use data (which includes previous development within the study area in the nearly 22 years since the SWFEIS was completed in 2003) combined with the proposed preservation associated with the eight permit applications indicates that future preservation within the study area will total at least 467,000 acres, or 46.9 percent of the study area (and potentially more if future projects provide similar ratios of preservation). This represents an additional 81,000 acres of preservation compared to the acreage identified for preservation in the SWFEIS.

***Comment: Hydrologic Impacts***

*The Environmental Groups expressed concerns regarding altered hydrologic regimes as a result of the Project and the potential effects on features downstream including the Camp Keais Strand, Florida Panther National Wildlife Refuge, Fakahatchee Strand Preserve State Park, and Picayune Strand.*

**Response**

The Water Management Report submitted to the South Florida Water Management District as a part of the ERP review process for Rural Lands West illustrates that the project will not cause adverse impacts to downstream entities.

Most of the on-site wetlands that are proposed to be impacted have historically served as reservoirs for the surrounding agricultural operations. Therefore, the hydrologic regime of these wetlands has been altered and remains subject to fluctuation based on agricultural operations. Rural Lands West is designed to significantly improve preserved wetlands by routing surface water flows from the proposed development areas through stormwater management facilities to those wetlands, resulting in more consistent and ecologically beneficial water levels, as required by the SFWMD permit issued for the project. Treated stormwater will be routed from stormwater management facilities into on-site wetlands and sheet flow through the wetlands will convey surface flows to off-site receiving wetlands. Control elevations for the stormwater management system were established based on the biological indicator elevations of wetland water levels. These design features will ensure that the hydroperiod within on-site preserved wetlands and off-site receiving wetlands are improved and maintained as required by the SFWMD permit.

*“”*The northernmost impediment to water flow in Camp Keais Strand, as identified by the South Lee County Watershed Plan, is an existing historic roadway which was the original road connection from Immokalee to Big Corkscrew Island. Further south in the Camp Keais Strand, water flows are restricted by the “pinch point farm field” and associated farm road. Improvements to the surface water flows through Camp Keais Strand will be accomplished through the removal of the historic roadway at the north end of the strand, removal of the pinch point farm road and restoration of the pinch point farm field. These improvements will extend the hydroperiod of the strand and help to restore the historic surface water delivery to the FPNWR. “”

***Comment: Prescribed Burns***

*The Environmental Groups encouraged the Corps to evaluate the effect of the Project on management programs for conservation lands, including prescribed burning.*

**Response**

The applicant has no intention of hindering the use of prescribed fire as a management technique both within the on-site conservation areas and at the nearby existing conservation lands. Throughout the application process, the applicant has communicated its commitment to the preservation and enhancement of valuable listed species habitat and continues to do so through their planned long-term management of the on-site conservation areas.

A Prescribed Burn Plan is provided as part of the Project's Biological Assessment. The on-site conservation areas will periodically use prescribed burns as a means of habitat management as outlined in the Project's mitigation plan and the Long-Term Management Plan. Required permits from the appropriate regulatory authorities will be obtained prior to implementation of prescribed burns. Homeowners will be educated on the benefits of prescribed fire to listed species habitat and will be notified that prescribed burning is a land management activity that will be utilized both on the on-site conservation areas and by land managers in the vicinity of the Project. This public education includes a notice in home sale closing documents to be signed by the Project's residents notifying them of the use of controlled burns at FPNWR and on nearby conservation lands.

***Comment: Environmental Impact Statement***

*The Environmental Groups argue that due to the significant effects that the proposed development will have on wetlands and wetlands ecosystems, specifically, cumulative effects on the endangered Florida panther, the Corps should prepare an Environmental Impact Statement (EIS) to comply with NEPA and properly inform its decision regarding the permit application. According to the Environmental Groups, the Corps is required to prepare an EIS due to the fragmentation of wetlands, and impacts to the functional value of wetlands, the levels of take that cumulatively are likely to appreciably diminish the survival and recovery of the Florida panther, and'"" the effects to Florida caracara.*

**Response**

Based on a number of factors, the Corps' Environmental Assessment (EA) for RLW should lead to a Finding of No Significant Impact (FONSI). Overall, the Project was designed to avoid and preserve the higher value wetlands and habitat, while focusing impacts on areas already cleared for agriculture. Areas of permitted impacts are limited to 3% of the Project site, and the majority of impacted wetlands do not serve as valuable parts of the broader ecosystems, with little functional synergy between the wetlands to be impacted and other wetland systems. Moreover, such impacts will be more than fully offset by mitigation that improves environmental functions. The Project also incorporates landscape-scale habitat and species planning that preserves large areas of habitat, preserves vital wildlife corridors connecting public conservation lands, and otherwise benefits listed species. Therefore, the proposed mitigation fully offsets and keeps impacts below NEPA's significance threshold such that the Corps is not required to prepare an Environmental Impact Statement (EIS).

Legal Background. The obligation of the Corps to analyze environmental impacts stems from a number of legal authorities, including Corps regulations, NEPA caselaw, CEQ NEPA implementing regulations,[22] Section 404(b)(1) guidelines, and (in general) NEPA itself. NEPA's

[22] The D.C. Circuit held in that the NEPA implementing regulations published by the Council on Environmental Quality (CEQ) are *ultra vires*. *See Marin Audubon Society v. Federal Aviation Administration*, No. 23-1067 (Nov. 12, 2024). In addition, President Trump issued an Executive Order on January 20, 2025 that requires the Chairman of CEQ to "provide guidance on implementing [NEPA] and [to] propose rescinding CEQ's NEPA regulations." E.O. "Unleashing American Energy" Sec. 5(b) (Jan. 20, 2025). Regardless of the status of CEQ's NEPA

statutory requirement to consider environmental effects is succinct: prepare, for "major Federal actions significantly affecting the quality of the human environment, a detailed statement" describing "reasonably foreseeable environmental effects of the proposed agency action." 42 U.S.C. § 4332(C). The concept of "cumulative effects" does not appear in the statute, but instead was established by agency regulations and developed through case law.

The NEPA analysis considers three types of effects: direct, indirect and cumulative: (i) direct are effects caused by the action and occur at the time and location of the action – e.g., the effects of a permitted discharge of fill material into WOTUS, 40 C.F.R. § 1508.1(i)(1), (ii) indirect are effects caused by the action that occur after the action or away from its location but are still reasonably foreseeable – for example, downstream sedimentation resulting from a permitted discharge of fill material into WOTUS, 40 C.F.R. § 1508.1(i)(2),[23] and (iii) cumulative are incremental effects of the agency action when added to effects of other past, present, and reasonably foreseeable actions. 40 C.F.R. § 1508.1(i)(3). "Reasonably foreseeable" means "sufficiently likely to occur such that a person of ordinary prudence would take it into account in reaching a decision." 40 C.F.R. 1508.1(ii).

For cumulative impacts, the focus is on the *incremental* effect of the agency action when added to other past, present and future activities. In other words, significance is not based on total effects, but rather on the significance of the *addition of the incremental effect* to total effects. For example, filling an isolated, degraded wetland may have few if any effects that accumulate with effects to other regional wetlands. *See Fritiofson v. Alexander*, 772 F. 2d 1225, 1245 (5th Cir. 1985) ("[I]t seems to us that a meaningful cumulative-effects study must identify: (1) the area in which effects of the proposed project will be felt; (2) the impacts that are expected in that area from the proposed project; (3) other actions — past, proposed, and reasonably foreseeable — that have had or are expected to have impacts in the same area; (4) the impacts or expected impacts from these other actions; and (5) the overall impact that can be expected if the individual impacts are allowed to accumulate.").

An EA is generally the appropriate level of NEPA review for an individual Corps permit. *See*, *e.g.*, 33 C.F.R. § 230.7(a) ("Regulatory Actions. Most permits will normally require only an EA."). An EA/FONSI is appropriate even if an action would otherwise have significant effects, if effects can be reduced below a significance threshold with mitigation. *See* 40 C.F.R. § 1501.6(a)(2) (The agency may issue "[a] mitigated finding of no significant impact if the agency determines, based on the environmental assessment, that NEPA does not require preparation of an environmental impact statement because the proposed action will not have significant effects due to mitigation."). The Corps' Standard Operating Procedures explain further:

> The Corps determines if an Environmental Impact Statement is required for an individual permit application. *An Environmental Impact Statement should only be prepared when it*

---

regulations, the Corps is subject to environmental review requirements under its own NEPA regulations and the 404(b)(1) requirements.

[23] "A direct effect is caused by the activity needing the Corps' permit authorization, which occurs at the same time and place (e.g., the direct effects of dam construction include the loss of habitat in the dam footprint). Indirect effects are those caused by the activity needing the Corps permit authorization, but which take place later in time or farther removed in distance (e.g., the indirect effects of dam construction include the inundation of the area behind the dam, and habitat and/or fisheries impacts downstream of the dam associated with hydroperiod changes)." Corps Regulatory Program, SOP at 17.

> *is legally required; that is, when the district concludes that the proposal would significantly adversely affect the quality of the human environment after consideration of any mitigation the Corps would require*. The Council on Environmental Quality's (CEQ) Forty Most Asked Questions Concerning CEQ NEPA Regulations, and numerous decisions of the Federal Courts, support the Corps approach of preparing Findings of No Significant Impact (FONSIs) based on requiring mitigation measures that will ensure that adverse environmental effects of a proposal will be reduced below the "significant" level, where that approach is practicable and appropriate. The determination of significance of potential adverse effects is done after considering all mitigation measures that will be required by the terms and conditions of the Corps permit.

Corps Regulatory Program, SOP at 22 (emphasis added).

Scope of Review. A cumulative effects analysis should also focus on effects actually caused by the agency action. "For the purposes of [NEPA], the scope of analysis should be limited to the specific activity requiring a Department of the Army permit and any additional portions of the entire project over which there is sufficient Federal control and responsibility to warrant NEPA review." Corps Regulatory SOP at 16; *see also* 33 C.F.R. Part 325, App B. Effects unrelated to the agency action, such as offshore undersea noise, probably would not be relevant to a Corps cumulative effects analysis of inland wetland impacts.

Here, the scope of analysis may properly be limited to the direct, indirect and cumulative effects associated with the work authorized by the Corps permit: discharges associated with only limited portions of the Project, including internal road crossings of wetlands and creation of water management features. Most of the locations where homes, businesses, school facilities, recreational amenities and other project features will be located will not overlay areas subject to Corps jurisdiction or require a Corps permit for construction. Nevertheless, even if the Corps considered effects associated with the overall Project, the direct, indirect, and cumulative effects would not significantly adversely affect the quality of the human environment.

An EIS Is Not Required. A project-specific EA for the Project should result in a FONSI. The direct impacts to approximately 262 acres of mostly lower value, degraded wetlands will be more than fully offset by the enhancement and preservation of over 4,000 acres of higher value on-site wetlands. The combination of confining impacts to already disturbed areas and significant compensatory mitigation ensures that no significant cumulative effects will occur.

The Project footprint was designed in an ecologically sensitive manner that avoids impacts to the vast majority of WOTUS within the 10,265-acre Project site. The curved boundaries of the Project footprint follow the natural shape and contours of existing wetland systems and habitat and allow for preservation. The Project's layout limits nearly all new construction to upland areas cleared long ago for ongoing, large-scale agricultural operations, while avoiding and preserving higher value wetland systems and species habitat.

Impacts to WOTUS comprise less than 3 percent of the Project site, and most of the jurisdictional wetlands that would be impacted are degraded as a result of having been historically used for agricultural water management operations and infestation by invasive exotic plant species. These impacts will be more than fully offset by substantial wetland and habitat preservation, restoration, creation, and enhancement.

The majority of the wetlands and habitat to be preserved are of much higher value than those to be impacted. Compensatory mitigation includes enhancement and preservation of 4,061.87± acres (over 90 percent) of on-site wetlands, as well 99.46± acres of wetland restoration, and 32.72± acres of wetland creation. The mitigation plan also includes the preservation and enhancement of 217.35± acres and restoration of 48.83± acres of upland preserves and upland buffers important to the life cycle of wetland-dependent wildlife species. Thus, impacts to 262.12± acres of mostly lower value, degraded wetlands will be more than fully offset by 4,194.05± acres of higher value wetland preservation, enhancement, restoration, and creation.

By confining impacts to already-disturbed areas and requiring significant compensatory mitigation, the incremental impacts of the action are not likely to cause any significant cumulative effects to the aquatic ecosystem or other environmental resources of concern in the area. Proposed impacts associated with RLW are also not likely to accumulate negatively with other reasonably foreseeable projects. Most of the proposed impacts are to wetlands that are heavily disturbed by surrounding agriculture operations and do not serve as highly valuable parts of the broader ecosystems. Thus, there is relatively little functional synergy between the wetlands to be impacted and other wetland systems. By contrast, the accumulation of benefits provided by RLW are expected to create a net increase in ecological function within the region.

As described in the Biological Assessment for RLW, the mitigation provided for impacts associated with RLW will result in a net positive increase in habitat value for federally-listed species in the region. The Project is consistent with landscape-scale planning that benefits listed species as reflected in Collier County's Rural Lands Stewardship Plan, and Project-level planning that results in preservation of vital corridors connecting vast public conservation lands in the area surrounding the Project site and beyond.

See response above, describing the eight applications currently under review by the Corps for projects in the region where Rural Lands West is located.

See the species-specific responses above, describing why the Project will not have significant direct, indirect, or cumulative impacts, including on panthers or caracara.

Overall, because the Project will fully offset impacts to wetlands and protected species, the Corps' EA should find that the Project will not have significant adverse impacts on the environment.

***Comment: Public Interest***

*The Environmental Groups argue the project is contrary to the public interest, in light of the following issues: significant adverse cumulative impacts on panther, impacts to wetlands that provide habitat for imperiled species, and footprint lies within significant regional watersheds.*

**Response**

The Corps' public interest review is a comprehensive evaluation guided by the criteria outlined in 33 C.F.R. § 320.4(a), which mandates consideration of a broad spectrum of factors, including "conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people." When the Corps considers this diverse set of factors, it will conclude that the authorized impacts are not contrary to the public interest.

In particular, the comments point to three factors: (i) cumulative adverse impacts on the panther, (ii) impacts to wetlands that provide habitat for protected species, and (iii) the location of the Project within a significant regional watershed. The first point is addressed above in the response to comments addressing cumulative impacts to the panther. As noted above, preservation provided by the Project will result in improved habitat for panther prey in areas away from Project development. Second, the conservation commitments provided by the applicant, including the permanent preservation of extensive, valuable habitat including wildlife dispersal corridors and areas proximate to existing public lands, will provide valuable conservation benefits. By contrast, the areas that will be impacted by the discharges of dredged or fill material (and the areas where development will occur) have minimal conservation value. They are located on the western portions of the property near existing development and are comprised largely of previously-cleared lands that are currently used for large-scale agricultural operations. Finally, the Project's conservation areas are part of a larger regional wildlife corridor connecting wildlife habitat from CREW lands and Corkscrew Swamp to the north, to the FPNWR. As such the preservation and management of these lands will provide a regional benefit for the wildlife and listed species. Therefore, the Project is consistent with the public interest.

***Comment: Public Hearing***

*The Environmental Groups contend the Corps should hold a public hearing to allow the public to weigh in on environmental impacts to the area and the public interest factors that the Corps must consider.*

**Response**

According to Corps regulations, the Corps will hold a public hearing on a Corps permit application only when it is necessary for making a decision on the application. *See* 33 C.F.R. § 327.4(a). This standard ensures that public resources are utilized efficiently and implies that a hearing should be held if it provides essential information or perspectives that are not otherwise available through the submission of written comments or other forms of public engagement.

The public has been afforded multiple opportunities to submit written comments on the CWA section 404 permit application for RLW. As noted above, the Corps first issued a public notice and received comments on this project in Summer 2017. The Corps initiated a second public comment period on September 19, 2024, and accommodated a request to extend the comment period from 30 days to 60 days (or until November 21, 2024). The public has provided a substantial amount of feedback during these public comment periods. The comments provided a comprehensive overview of public concerns and perspectives. There is no indication that additional oral presentations would reveal significant new insights or data.

A public hearing, therefore, is not necessary for the decision on this permit application. The existing mechanisms for public participation have sufficiently captured community input, and the decision-making process is adequately informed by the materials and insights already gathered.

## References


Belden, R.C., W.B. Frankenberger, R.T. McBride, and S.T. Schwikert. 1988. Panther habitat use in southern Florida. Journal of Wildlife Management 52(4):660-663.

Comiskey, E. J., O. L. Bass, Jr., L. J. Gross, R. T. McBride, and R. Salinas. 2002. Panthers and forests in south Florida: an ecological perspective. Conservation Ecology 6:18.

Dees, C. S., J. D. Clark, and F. T. Van Manen. 2001. Florida panther habitat use in response to prescribed fire. Journal of Wildlife Management 65:141-147.

Harlow, R. F., and F. K. Jones. 1965. The white-tailed deer in Florida. Florida Game and Fresh Water Fish Commission Technical Bulletin 9, Tallahassee, FL.

Hewitt, D. G. 2011 Biology and Management of White-tailed Deer. New York, NY: CRC Press.

Land E.D., D.B. Shindle, R. J. Kawula, J.F. Benson, M.A. Lotz, D.P. Onorato. 2008. Florida panther habitat selection analysis of concurrent GPS and VHF telemetry data. Journal of Wildlife Management: Volume 72, No. 3 pp. 633–639.

Maehr, D.S. 1990. Florida panther movements, social organization, and habitat utilization. Final performance report, study no. 7502. Florida Game and Fresh Water Fish Commission, Tallahassee, Florida.

Maehr, D. S. 1992. Florida panther. Pages 176-189 in S.R. Humphrey (ed). Rare and endangered biota of Florida. Volume I: mammals. University Press of Florida, Gainesville, FL.

Maehr, D.S., E.D. Land, and J.C. Roof. 1991. Social ecology of Florida panthers. National Geographic Research and Exploration 7(4):414-431.

U.S Fish and Wildlife Service. 2012. Panther Habitat Assessment Methodology, U.S.Fish and Wildlife Service Southeast Region, South Florida Ecological Services Office, Vero Beach, Florida.

U.S. Fish and Wildlife Service. 2013. Eastern Indigo Snake Conservation Guidelines