

## **Perdido Key Beach Mouse Unified Mitigation Approach Frequently Asked Questions**

### **What is the Perdido Key Beach Mouse and why is it important?**

The Perdido Key Beach Mouse (PKBM) is a unique subspecies of oldfield mouse that only inhabits Perdido Key and lives in burrows it digs into the primary, secondary, and scrub dunes. They are active at night and eat sea oats and various grass and other seeds. The PKBM is protected as a state and federally endangered species (the highest risk category for extinction).

Because the PKBM lives in the dunes of Perdido Key, conserving beach mouse habitat protects the dunes, which in turn buffer the houses, condominiums, and hotels along the beach from strong storm surges (i.e., as result from hurricane activity). Therefore, strategies taken to benefit the mouse also benefit people.

### **How does the PKBM affect development?**

Natural populations of PKBM are only known from Perdido Key, which is undergoing rapid development as prime oceanfront real estate. Because the PKBM is protected by federal and state laws, when a property owner or developer plans to modify any land that will adversely impact the beach mouse, some form of mitigation for the beach mouse and its habitat must be provided.

### **What mitigation options have been used traditionally?**

Traditional options for mitigating impacts to beach mice and other endangered species usually involve complete avoidance of habitat impact, minimization of impacts, or 2:1 or greater land preservation (i.e., for one acre of impact, two or more acres would be protected). Another option being developed for beach mice in Alabama restricts development to 1/10 of each lot and includes a per unit assessment of several thousand dollars.

### **Why is a new mitigation option being considered?**

The restricted land area and extremely high real estate values on Perdido Key make traditional land protection measures difficult. Therefore, as a result of requests from the development community on Perdido Key, employees of Escambia County (EC), the Florida Fish and Wildlife Conservation Commission (FWC), and U.S. Fish and Wildlife Service (FWS) are working together to formulate a proposed new process for mitigating impacts to the PKBM and its habitat. This proposed process may be considered for adoption as official policy by the three agencies.

### **How would the proposed mitigation process work?**

The proposed mitigation process would enable *in lieu* contributions to a conservation fund as a last component of conservation after onsite avoidance, minimization, and mitigation has been completed. These contributions would provide dedicated funds to

implement the conservation strategy and thereby enhance the survival potential of the PKBM and work toward its long-term recovery.

Based on the conservation strategy, Memorandum of Agreement (MOA), and business plan (see below), the FWC, FWS, and EC have developed the proposed approach, which consists of two options. The first option consists of an annual recurring need of \$201 per development unit per year and a one-time initial impact fee of \$100,000 per acre of impacted habitat. Additionally, protection of the primary dune system seaward of the 1974 Coastal Construction Control Line (CCCL) would be needed via a county ordinance or other measure. The second option consists of an annual recurring need of \$100 per development unit per year and a one-time initial impact fee of \$157,000 per acre of impacted habitat, as well as the county ordinance to protect the primary dune system seaward of the CCCL.

**What are the benefits of the proposed mitigation option?**

Much collaborative effort has gone into creating another mitigation option for PKBM, which developers and landowners could use (or not) at their discretion. Major benefits of this proposed approach would be the reduced costs to developers compared to traditional approaches, the speed with which permits could be issued, and the availability of unified mitigation that would simultaneously meet the requirements of all three levels of government (county, state, and federal).

**What are some typical amounts under the proposed mitigation option?**

Monetary outcomes of the proposed one-time initial need, when applied to some typical developments on Perdido Key, are as follows:

Option 1 (One-time impact fee of \$157,000/acre and annual assessment of \$100/unit/year)

Project	Acres of Impact	\$	# Units	\$ / Unit
A	0.32	50,240	15	3,349
B	0.21	32,970	16	2,061
C	0.68	106,760	30	3,559
D	0.43	69,080	13	5,314
E	0.17	26,690	1	26,690
F	0.54	84,780	18	4,710

Option 2 (One-time impact fee of \$100,000/acre and annual assessment of \$201/unit/year)

Project	Acres of Impact	\$	# Units	\$ / Unit
A	0.32	32,000	15	2,133
B	0.21	21,000	16	1,313
C	0.68	68,000	30	2,267
D	0.44	44,000	13	3,385

E	0.17	17,000	1	17,000
F	0.54	54,000	18	3,000

The difference in cost per unit is determined by how much onsite avoidance and minimization was practicable and how many units are proposed for a project. Habitat is critical to the PKBM, and the more that impacts to it can be avoided and minimized the better. But if impacts are unavoidable, then resources are needed to secure and maintain habitat through other means.

**How does the proposed mitigation option compare to traditional options?**

Traditional 2:1 land conservation would cost between \$3 million and \$13 million per acre, depending upon location in the Key. Restricting development to 1/10 of a lot would have the equivalent cost of between \$1.4 million and \$5.8 million per acre depending upon location in the Key plus several thousand dollars per development unit within each project. In comparison, the proposed approach would cost either \$100,000 per acre of impact to PKBM habitat plus \$201 per development unit per year, or \$157,000 per acre of impact to PKBM habitat plus \$100 per development unit per year.

**What efforts have gone into creating the proposed mitigation option?**

Three main elements were created over the past several months and have been used in development of the proposed approach: 1) a conservation strategy for the PKBM, 2) a draft Memorandum of Agreement (MOA) between the FWC, FWS, and EC that creates the conservation fund and stipulates how it would be managed, and 3) a business plan for how the conservation strategy could be implemented.

**What are the main components of the Conservation Strategy?**

The conservation strategy is based on four key components and is dependent upon active management at several levels. The key components build on each other and include:

1. use of three public land holdings as population centers and anchors
2. habitat connectivity along the primary dunes south of Perdido Key Drive to provide connectivity and additional living area for the PKBM
3. interconnected habitat patches north of Perdido Key Drive to provide additional connectivity, living area, and protection from hurricanes for the PKBM
4. a captive breeding program to provide security from catastrophic loss due to hurricanes or other disasters.

**What are the main management actions identified in the strategy?**

Recurring management needs for the conservation strategy include:

- population monitoring and strategy implementation
- dune habitat conservation
  - Escambia County CCCL ordinance
- predator control
- education, awareness, and outreach
- captive breeding program development and maintenance

- research on essential life history components, movement patterns, and genetics

One-time management needs for the conservation strategy include:

- creation of the conservation fund
- assessment of genetic structure and viability of PKBM on the key
- dune restoration
- habitat protection

**What is the MOA and what does it do?**

The MOA is a legal agreement between EC, the FWC, and FWS. It allows for unified mitigation or “one-stop shopping” that covers the county, state, and federal requirements in a single effort. The MOA designates that the fund would reside within the County and stipulates that it can only be used to further the conservation strategy for the PKBM. Additionally, it mandates that all three entities must agree on expenditures.

**What is the business plan?**

Through timely financial assistance from the Wildlife Foundation of Florida, a business plan was contracted for with an independent economic firm (RCF Economic and Financial Consulting, Inc.) to estimate the costs associated with the conservation strategy. The business plan describes various scenarios and lays out costs in a clear and consistent manner. Additionally, it recommends protocols for administering the fund and making it fiscally sound.