

BISCAYNE BAY
ECOSYSTEM
RESTORATION
RESERVOIR

A Plan to Help Restore the Bay



Restoring the Bay

Principle Objectives:

- Provide a source of clean, fresh water that is consistent with CERP
- Identify a source of fresh water that will not impact Everglades National Park
- Provide fresh water that will offer potential secondary benefits:
 - Mitigate sea level rise
 - Provide CERP regional water availability assurances
 - Storage capacity to help moderate flooding
 - Reduce saltwater intrusion



Biscayne Bay Ecosystem Restoration Reservoir



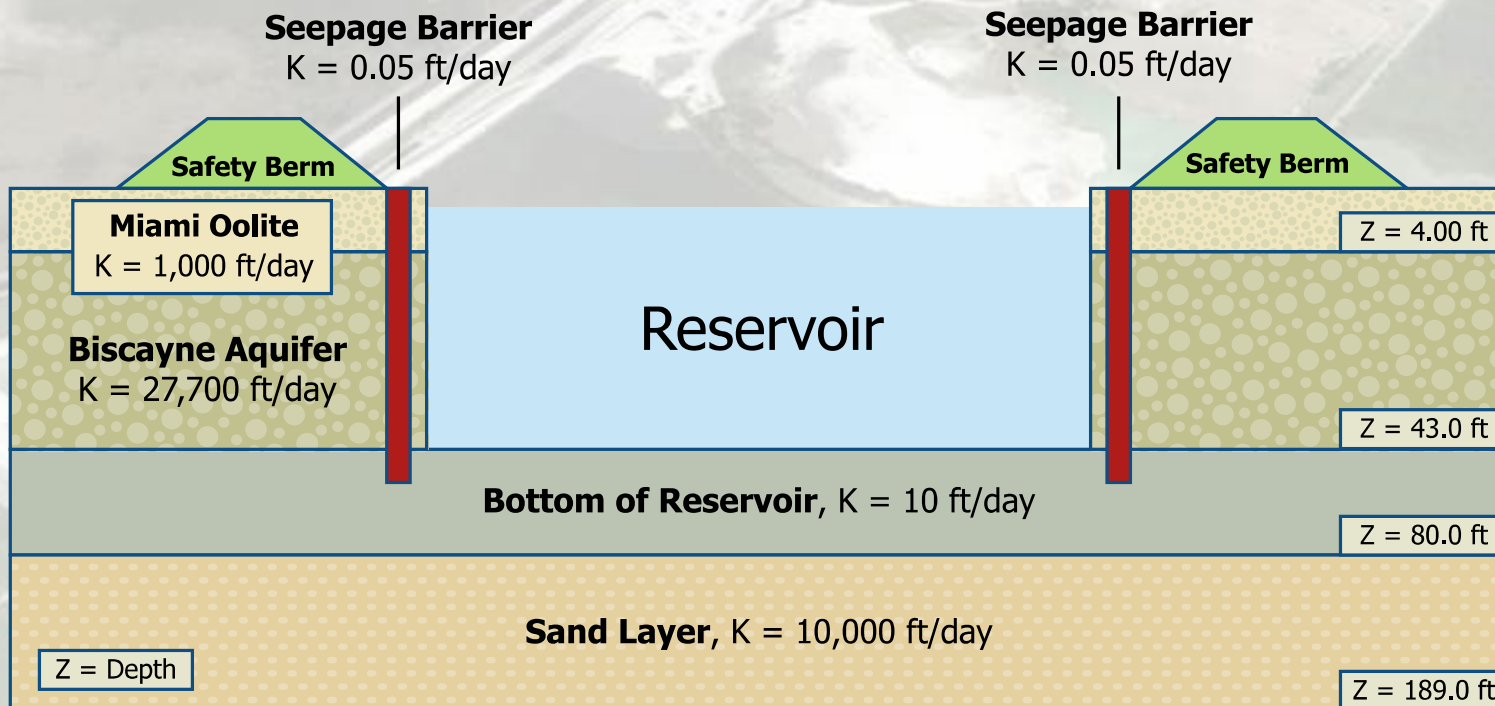
BISCAYNE BAY ECOSYSTEM RESTORATION RESERVOIR

Biscayne Bay Ecosystem Restoration Reservoir (BBERR) is an existing rock mine adjacent to the L-31N canal west of Miami.

BBERR is a proposed solution to meet the Bay's freshwater needs.

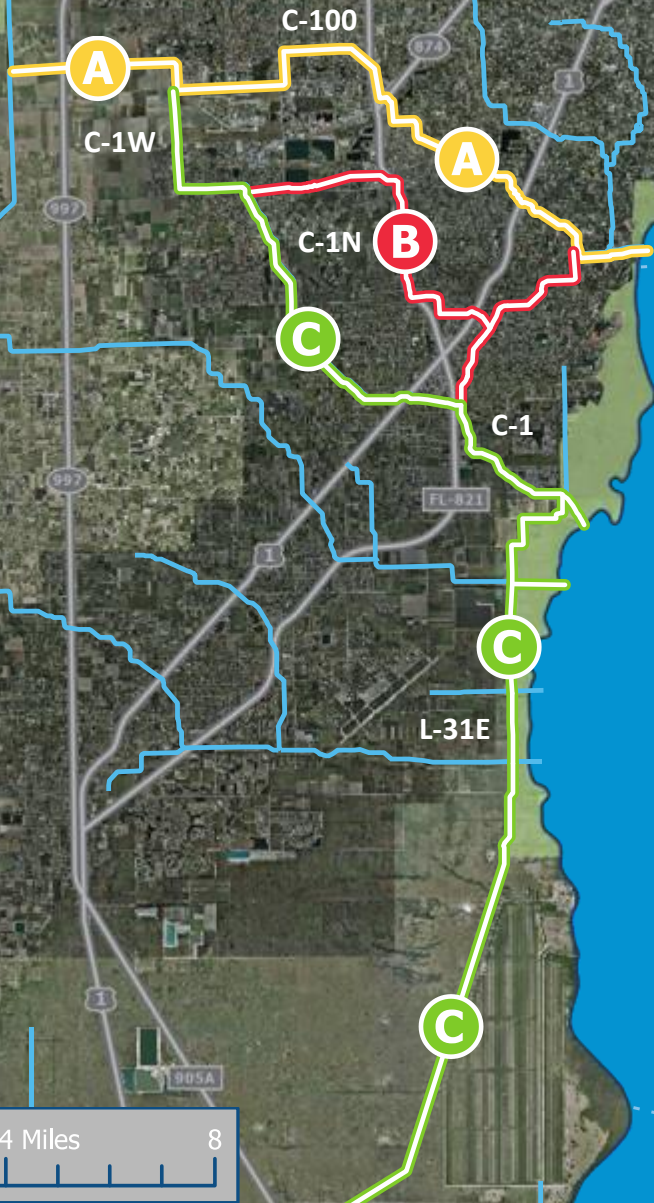
BBERR: A Proposed Solution

Required Infrastructure



Delivering Water Using Existing Infrastructure

Everglades National Park



Mangrove Preserve

Biscayne Bay

Biscayne Bay National Park Boundary

A Route A

B Route B

C Route C



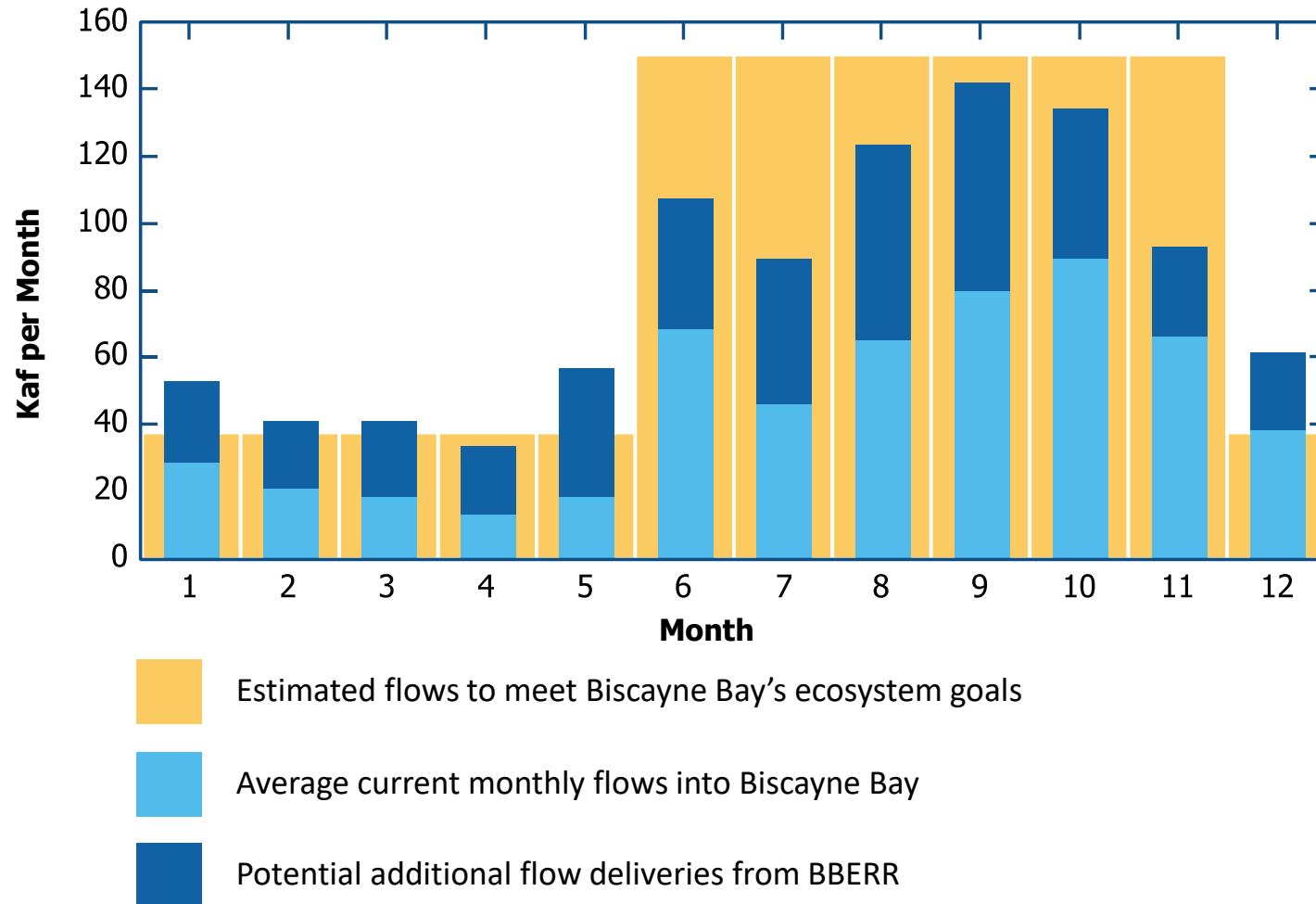
BBERR: A Proposed Solution

Biscayne Bay Ecosystem Restoration Reservoir (BBERR)

- When completed, would cover a minimum of 1,800 acres and deliver a yearly average of 380,000 AF of fresh water
- Captures excess water from L-31N and the natural groundwater seepage from ENP and the WCA's
- Water released to the bay via existing canal systems with minor improvements
- Potential to expand for a total of 2,400 acres

BBERR: A Proposed Solution

**Total Average Flows Including BBERR Deliveries
vs Bay's Ecosystem Restoration Goal**



BBERR: A Proposed Solution

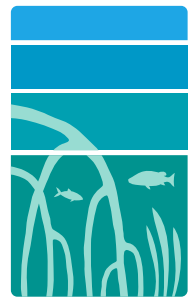
Estimated Project Costs

- Site Preparation = \$2.8M
- Berms and Curtain Walls = \$98.9M
- Canal Improvements = \$1.8M
- New Conveyance Canal Connections = \$25.7M
- Inflow/Outflow structures and Pump Stations = \$33.8M
- Contingencies = \$40.8M
- Project Administration and Management = \$46.9M
- **Estimated Total Costs = \$250.7M**

BBERR: Conclusion

The reservoir can supply the fresh water needed to help restore Biscayne Bay's ecosystem

- Only viable option to provide additional clean, fresh water to the bay
- Costs are highly favorable compared to reuse
- The reservoir can provide water availability assurances as required by CERP
- Utilizes existing infrastructure with minimal improvements
- Favorable geology to eliminate lateral seepage losses and reduce groundwater seepage
- Can be used to combat sea level rise and salt water intrusion
- Can moderate flooding in C-4 and L-31 N



BISCAYNE BAY ECOSYSTEM RESTORATION RESERVOIR

For information, contact:

Irela Bagué
Bagué Group
15 Madeira Avenue #6
Coral Gables, FL 33134
irela.bague@baguegroup.com
(305) 785-2763

Kenneth G. Ammon, P.E.
Ammon Water Resource Engineering LLC
429 W. Pennsylvania Avenue
Deland, FL 32720
KenAmmongov@yahoo.com
(561) 248-2766