



# Central Everglades Planning Project (CEPP) Ecosystem Services

**Presentation for GEER 2015  
April 22, 2015**

**Presenter: Dr. Kelly Keefe**  
[Kelly.j.keefe@usace.army.mil](mailto:Kelly.j.keefe@usace.army.mil)

**Authors: Dr. Leslie Richardson (USGS), Dr. Kelly Keefe (USACE),  
Dr. Chris Huber (USGS), Dr. Laila Racevskis (UF), Gregg Reynolds  
(ENP), Scott Thourot (SFWMD), Ian Miller (SFWMD)**

***Please see publication provided for more  
information.***

# Monetized Ecosystem Services of the Central Everglades Planning Project (CEPP)

Recreation access  
from net fewer  
closures

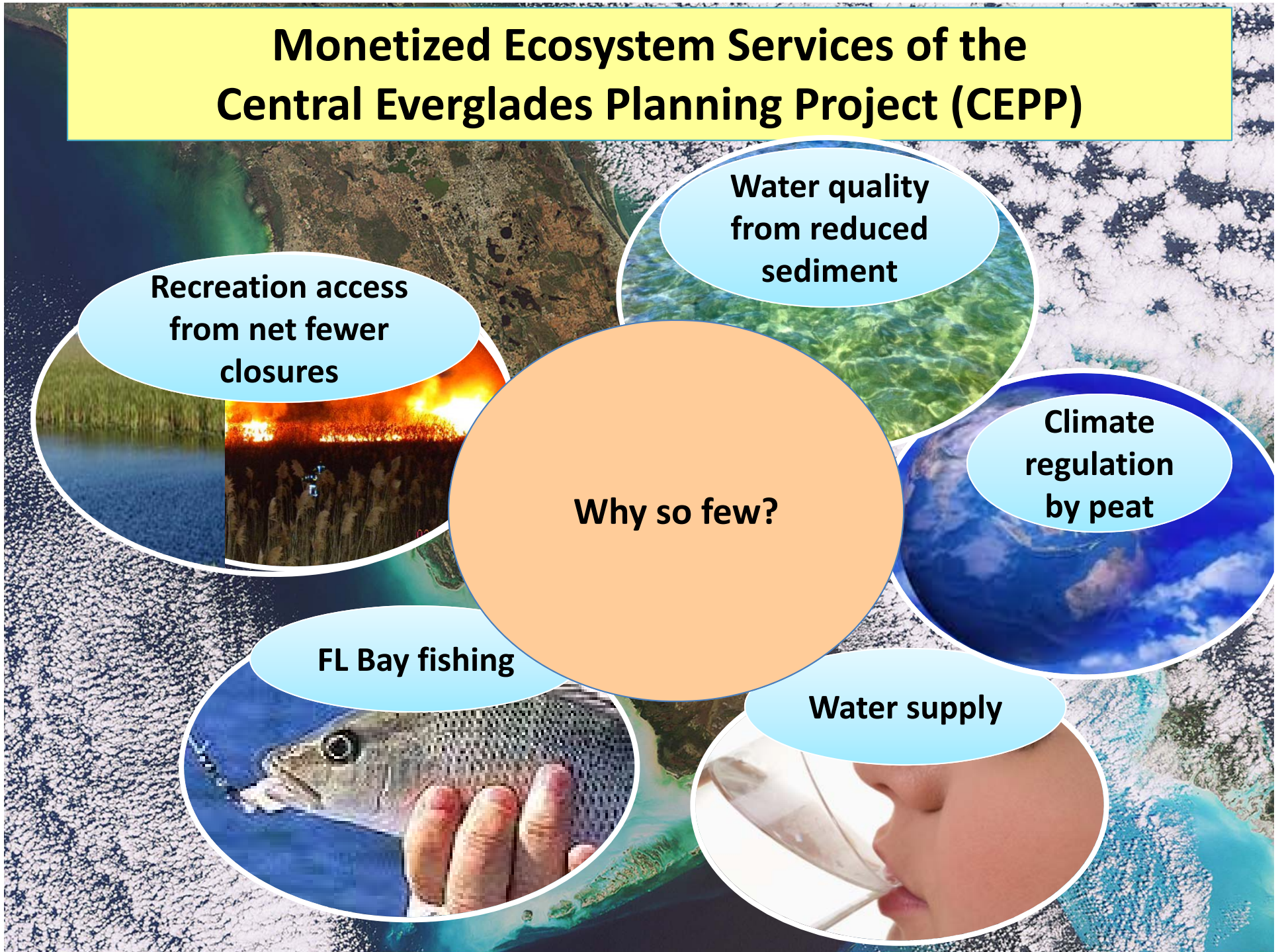
Water quality  
from reduced  
sediment

Climate  
regulation  
by peat

Why so few?

FL Bay fishing

Water supply



## Many services were considered...

Proposed Ecosystem Service	Will CEPP change it?		
Aesthetics	Y		
Biodiversity and species composition	Y		
Climate regulation...	Y		
SW coast stabilization (ENP)	Y		
Ecological connectivity of landscapes	Y		
Education	Y		
Fishing: commercial	Y		
Fishing: recreational, Bay	Y		
Fishing: recreational, canals	Y		
Fishing: recreational, Lake Okeechobee	?		
Fishing: recreational in N. Estuaries	?		
Frogging	Y		
Real estate values	?		

See  
publication  
for full list!

**... but few had the right data and tools available.**

Proposed Ecosystem Service	Will CEPP change it?	Tool/data to estimate change?	
Aesthetics	Y		
Biodiversity and species composition	Y	Y	
Climate regulation...	Y	Y	
SW coast stabilization (ENP)	Y		
Ecological connectivity of landscapes	Y	Y	
Education	Y		
Fishing: commercial	Y	Y	
Fishing: recreational, Bay	Y	Y	
Fishing: recreational, canals	Y		
Fishing: recreational, Lake Okeechobee	?		
Fishing: recreational in N. Estuaries	?		
Frogging	Y	Y	
Real estate values	?		

**See  
publication  
for full list!**

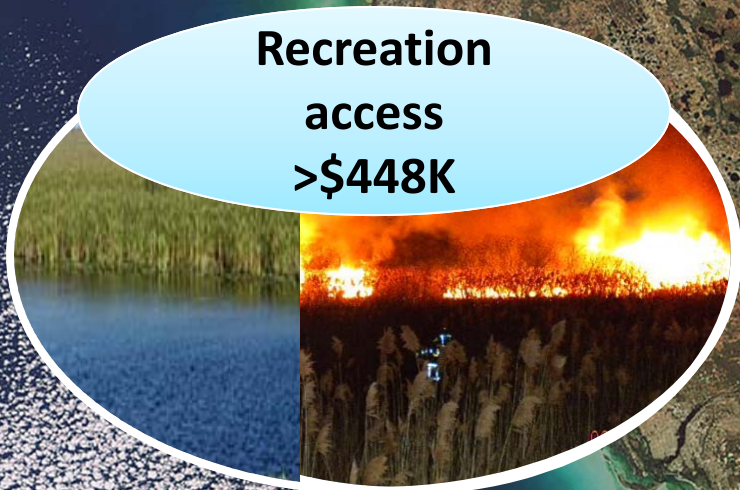
... but few had the right data and tools available.

Proposed Ecosystem Service	Will CEPP change it?	Tool/data to estimate change?	Economic data on value?
Aesthetics	Y		
Biodiversity and species composition	Y	Y	
Climate regulation from peat...	Y	Y	Y
SW coast stabilization (ENP)	Y	?	
Ecological connectivity of landscapes	Y	Y	
Education	Y		
Fishing: commercial	Y	Y	Y
Fishing: recreational, Bay	Y	Y	Y
Fishing: recreational, canals	Y		Y
Fishing: recreational, Lake Okeechobee	?		Y
Fishing: recreational in N. Estuaries	?		Y
Frogging	Y	Y	
Real estate values	?	?	Y

See publication for full list!

**Even with limitations, CEPP values counter the construction cost estimate of the project.**

**Recreation  
access  
>\$448K**



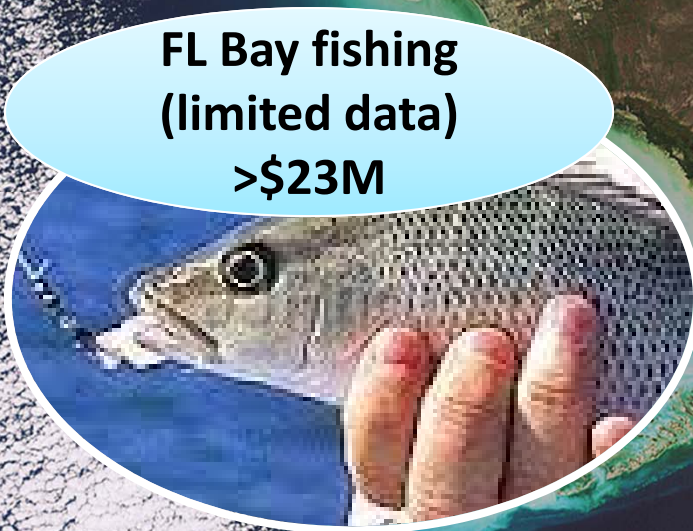
**Reduced  
sediment  
\$486K**



**Climate  
regulation  
>\$1B**



**FL Bay fishing  
(limited data)  
>\$23M**



**Water supply  
>\$617M**



# Ecosystem services have great potential for expressing the value of restoration projects...

More Lake O info needed

More estuary info needed

More recreation info needed

Firefighting and health costs info needed

Mangrove and coastal info needed

Non-use values info needed!

Great climate info needed

... needed

... water supply info needed

...when the right data and tools are available.  
Work by all of us can help this happen!