



*Florida Department of
Environmental Protection*

Banana River Lagoon Basin Management Action Plan

Policy Briefing
February 1, 2012





Meeting Overview

1. Welcome
2. Indian River Lagoon Basin Total Maximum Daily Loads (TMDLs)
3. Central Indian River Lagoon (IRL) Basin Management Action Plan (BMAP)
4. BMAP Progress to Date
5. Next Steps





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Economic Value of the Lagoon

- Lagoon is a valuable economic, recreational, and ecological asset for state and local governments.
- To quantify its value an economic study was prepared in 2008 by Hazen and Sawyer, P.C.
- Study supported by IRL Estuary Program, SJRWMD, and SFWMD.





Economic Value

- The IRL provided \$3.725 billion in benefits to residents and visitors for 2007.
- This is broken out to the county level as:

County	Value
Volusia	\$658,000,000
Brevard	\$934,000,000
Indian River	\$438,342,000
St. Lucie	\$545,041,000
Martin	\$370,240,000





Economic Value of Seagrass, Wildlife, and Water Quality

- Seagrass value estimated as \$329 million (for 72,400 acres in 2007).
- Seagrasses are important part of Lagoon's ecology; foundation of food web for many of the animals that live in the Lagoon.
- Recreational and non-use value would increase by \$80 million per year with significant increase in diversity of wildlife on lagoon and improved water quality in the basin.





Economic Contribution

- Lagoon related activities generate close to \$630 million in income for local residents.
- Contribute almost \$112 million in state and local fee and tax revenue.
- Supports 15,000 full and part-time jobs.





Indian River Lagoon Basin

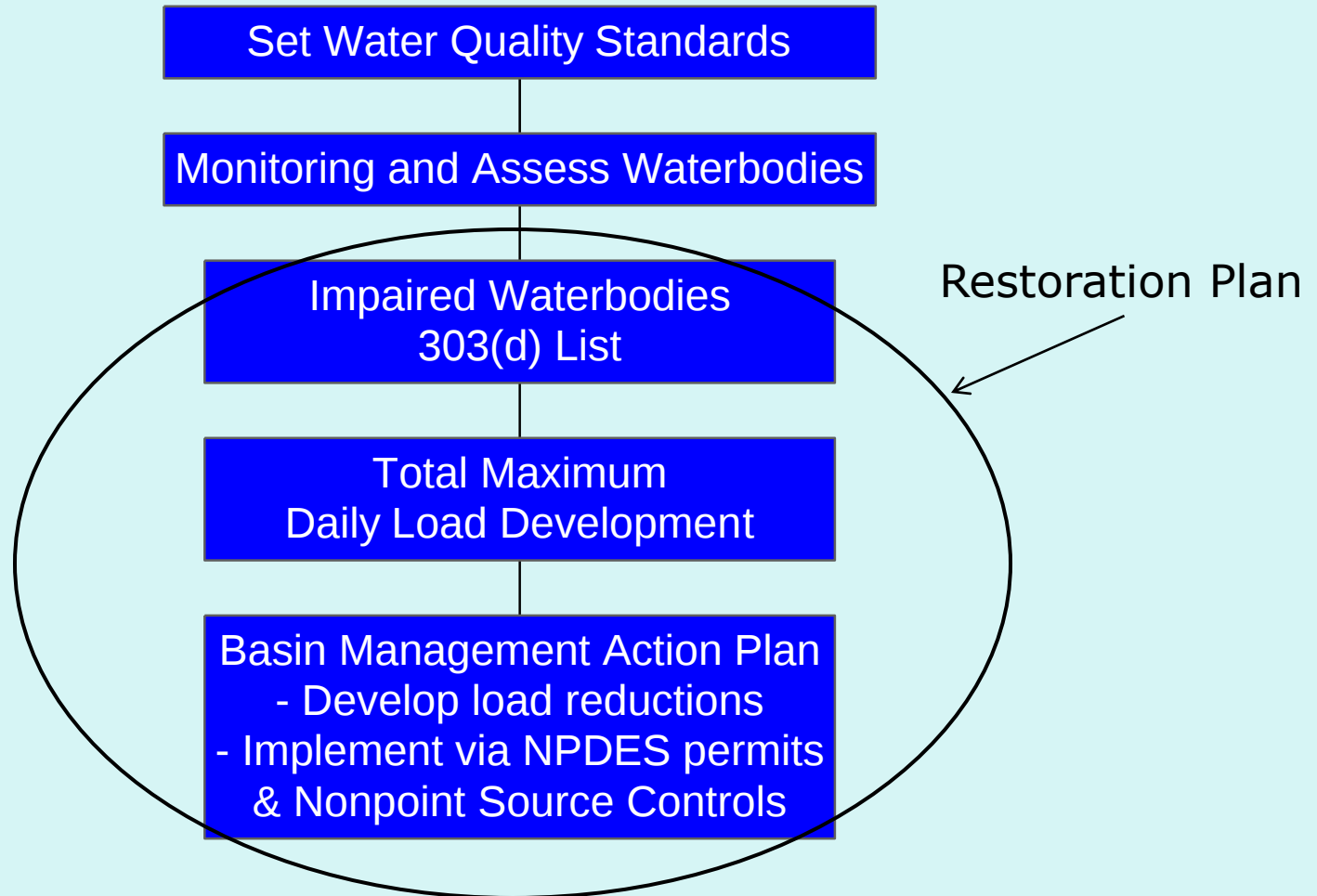


<http://www.sjrwmd.com/itsyourlagoon/index.html>





CWA/TMDL Process





Regulatory Framework for TMDLs

- Under Section 303(d) of the federal Clean Water Act, every two years each state must identify its “impaired” waters that do not meet their designated uses.
- The Florida Department of Environmental Protection (FDEP) is responsible for developing this “303(d) list” of impaired waters.
- FDEP develops and adopts TMDLs for the waterbody segments it identifies as impaired.





Regulatory Framework, continued

- The processes for listing impaired waters and establishing TMDLs are found in:
 - Section 403.067, Florida Statutes (F.S.), known as the Florida Watershed Restoration Act (FWRA); and
 - Florida's Identification of Impaired Surface Waters Rule (IWR), Rule 62-303, Florida Administrative Code (F.A.C.).





Numeric Nutrient Criteria and TMDLs

- TMDLs become the nutrient criteria for a waterbody.
- Adopted as site specific alternative criteria.



Enforcement of BMAP Activities

- For point sources, wastewater treatment facilities (WWTFs) and municipal separate storm sewer systems (MS4s), enforcement is through the National Pollutant Discharge Elimination System (NPDES) permits.
- For nonpoint sources, enforcement is through the FDEP Secretarial-adopted BMAP.
- Agricultural producers are required to implement appropriate best management practices (BMPs) for their commodities or implement FDEP designed water quality monitoring to show they are not having an impact.





TMDL and Verified Impairment

- TMDL – What is a Total Maximum Daily Load?
 - ❖ *The maximum amount of a pollutant that a waterbody can assimilate and still meet water quality standards.*
- Developing TMDLs for impaired waters verified by the State is a legal requirement.
 - ❖ *Clean Water Act Section 303(d); and*
 - ❖ *Florida Watershed Restoration Act (403.067, F.S.).*
- Nutrient impairment verification for the basin was conducted using the procedures defined in the Identification of Impaired Surface Water (Chapter 62-303, F. A. C.) based on nutrient criteria.





Florida Nutrient Criteria

- The nutrient criteria defined in the Surface Water Quality Standard (62-302, F. A. C.):

In no case shall nutrient concentrations of a body of water be altered so as to cause an imbalance in natural populations of aquatic flora or fauna.





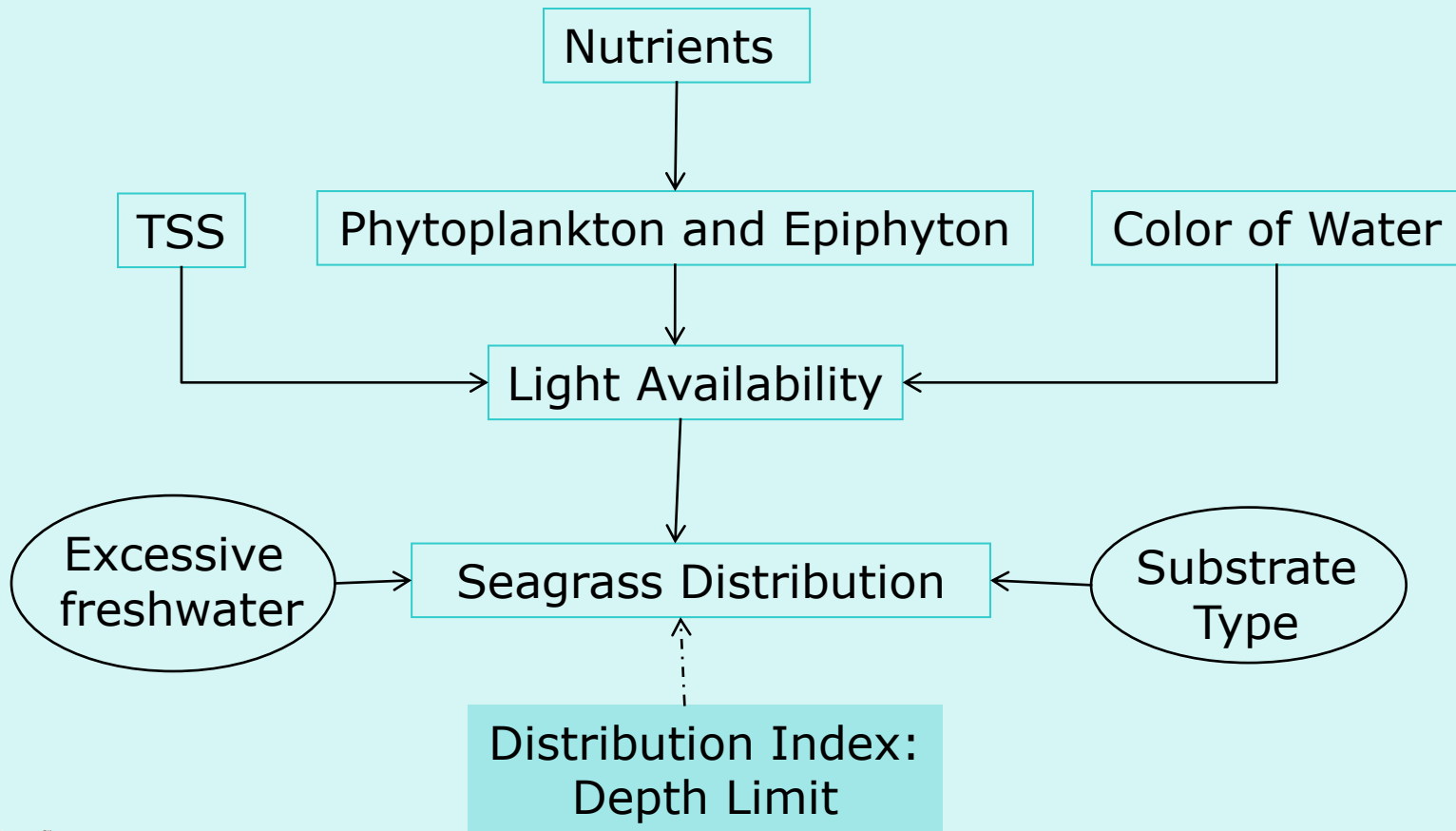
Imbalance of Seagrass Communities

- Seagrass habitat plays an important ecological role (Hanisak 2001) in the IRL.
- All seven species of seagrass found in Florida appear in the Central Indian River (IR) and four species in North IR and Banana River (BR) Lagoon areas (Dawes, et al. 1995).
- The seagrass distribution in many IR and BR lagoon segments has declined since the 1950s (Haddad 1985).
- A high management priority for IR and BR lagoons is to attain and maintain a functioning macrophyte-based ecosystem (IRLNEP 1993, Steward et al. 1994).





Seagrass and Nutrient Impairment



North Indian River Lagoon (IR1-3 to IR9-11)

 SJRWMD Segment Boundary

 Department WBID Boundary

 IR1-3

 IR4

 IR5

 IR6-7

 IR8

 IR9-11

 BR1-2

 BR3-5

 BR6

 BR7

 IR12

 IR13A

 IR13B

 IR14

 IR15

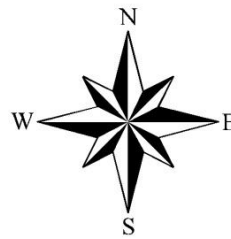
 IR16-20

 IR21

Banana River Lagoon (BR1-2 to BR7)

Central Indian River Lagoon (IR12 to IR21)

0 5,000 10,000 20,000 30,000 40,000 Meters



Maximum Achievable Depth-Limit

- Lagoon segmentation
- Seagrass depth-limit as the index
- Seagrass maps for 1943, 1986, 1989, 1992, 1994, 1996, and 1999 were used.
- Maximum achievable depth-limit obtained based on the deep boundary of the combined seagrass maps.



TN and TP Targets

- Establish relationship between watershed loading and seagrass depth limit.
 - ❖ *Per acre TN and TP watershed loading simulated using the PLSM/HSPF and log transformed.*
 - ❖ *Seagrass depth-limit converted to percent deviation from the maximum achievable depth-limit.*
 - ❖ *Regress log transformed per acre TN and TP loadings against seagrass percent deviation.*
- Target per acre TN and TP loads identified as the loads that result in the depth-limit 10% shallower than the maximum achievable depth-limit.





TMDL Allocation

- $TMDL = \sum WLA + \sum LA + MOS$ (waste load allocation + load allocation + margin of safety)
- WLAs for the wastewater facilities were established using the following rules:
 - ❖ *For facilities with AWT discharge concentrations ($TN \leq 3.0$ mg/L and $TP \leq 1.0$ mg/L) or discharging relatively small quantity: 95th percentile of existing load was granted as WLA.*
 - ❖ *For facility not reaching AWT, existing long-term annual average was granted as the WLA.*
- WLAs for MS4 permitted areas and LAs were calculated as the difference between the total TMDLs and WLAs for each segment.

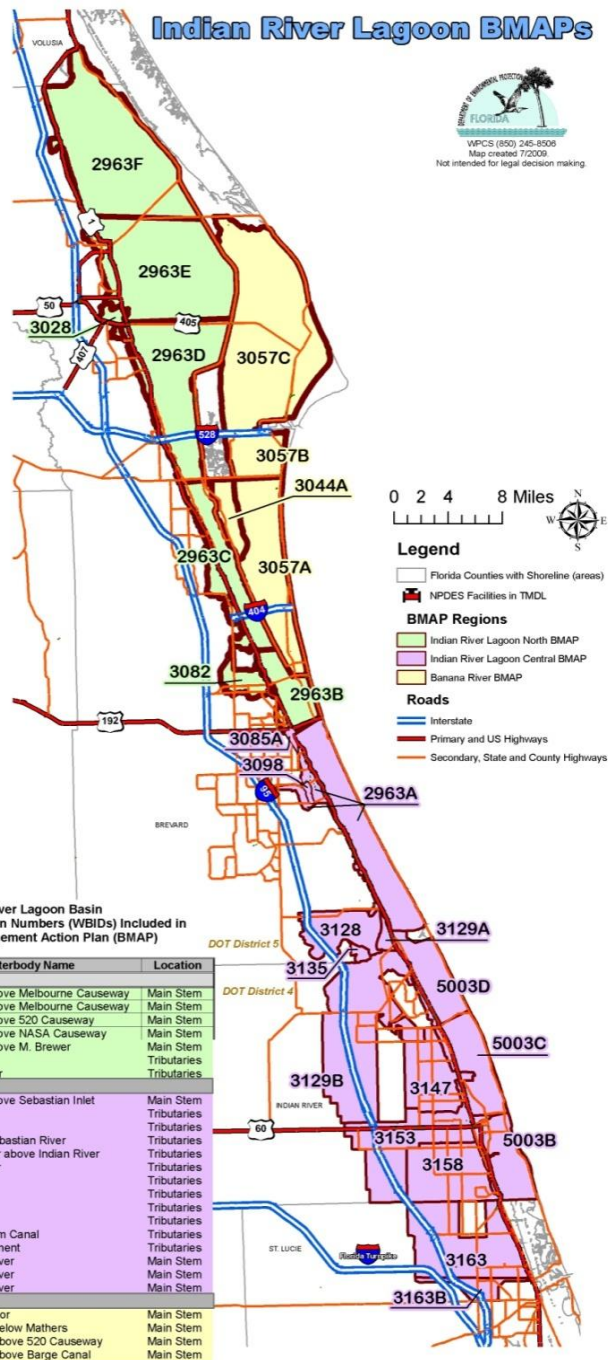
MOS: Margin of Safety.





TMDL Components for the BRL

WBID	Parameter	TMDL (lb/yr)	WLA _{NPDES} wastewater (lb/yr)	WLA _{NPDES} Stormwater	LA (lb/yr)	MOS
3057C	TN	116,314	1214	43%	43%	Implicit
3057A+3057B	TN	144,780	6173	33%	33%	Implicit
3044A	TN	30,661	N/A	50%	50%	Implicit
3057C	TP	7,825	302	66%	66%	Implicit
3057A+3057B	TP	12,181	1221	59%	59%	Implicit
3044A	TP	3,247	N/A	68%	68%	Implicit



- TMDLs adopted March 2009.
- Cover the IRL from just south of Ponce de Leon inlet in Volusia County to just north of Fort Pierce Inlet, and the Banana River Lagoon.
 - This area includes 13 waterbody identification (WBID) numbers.
- The Banana River Lagoon portion is located between the City of Cape Canaveral and Merritt Island and connects to the IRL at its south end.





Questions on the TMDLs

- Allocation Stakeholders:
 - Brevard County
 - City of Cape Canaveral
 - City of Cocoa Beach
 - City of Indian Harbour Beach
 - City of Satellite Beach
 - Cape Canaveral Air Force Station
 - FDOT District 5
 - Kennedy Space Center
 - Morton Salt
 - Patrick Air Force Base
- Other Interested Parties





Banana River Lagoon BMAP



Courtesy of Robert Day





BMAPs

- A BMAP is developed collaboratively with stakeholders to meet provisions in Section 403.067(7), Florida Statutes (F.S.).
- BMAPs are adopted by FDEP Secretarial Order.
- BMAPs are enforceable.





Key BMAP Components

- TMDLs being addressed;
- Define BMAP area;
- Assumptions and considerations;
- Future growth;
- Allocations to responsible sources (as needed;
 - Allocations can also be made to basin
- Projects to meet the TMDL;
- Monitoring plan;
- Process to assess progress towards the TMDL;
- Implementation timeline and commitments; and
- Appendices with supporting information.





BMAP Approach

- The TMDL reductions will be phased over a 15-year period.
- The first iteration of the BMAP will cover a 5-year period.
 - **Approximately end-2012 through end-2017.**
 - **First 5-years requires 15% reduction**
- This iterative approach allows for project implementation to achieve reductions while monitoring occurs to better understand seagrass response to the nutrient reductions.





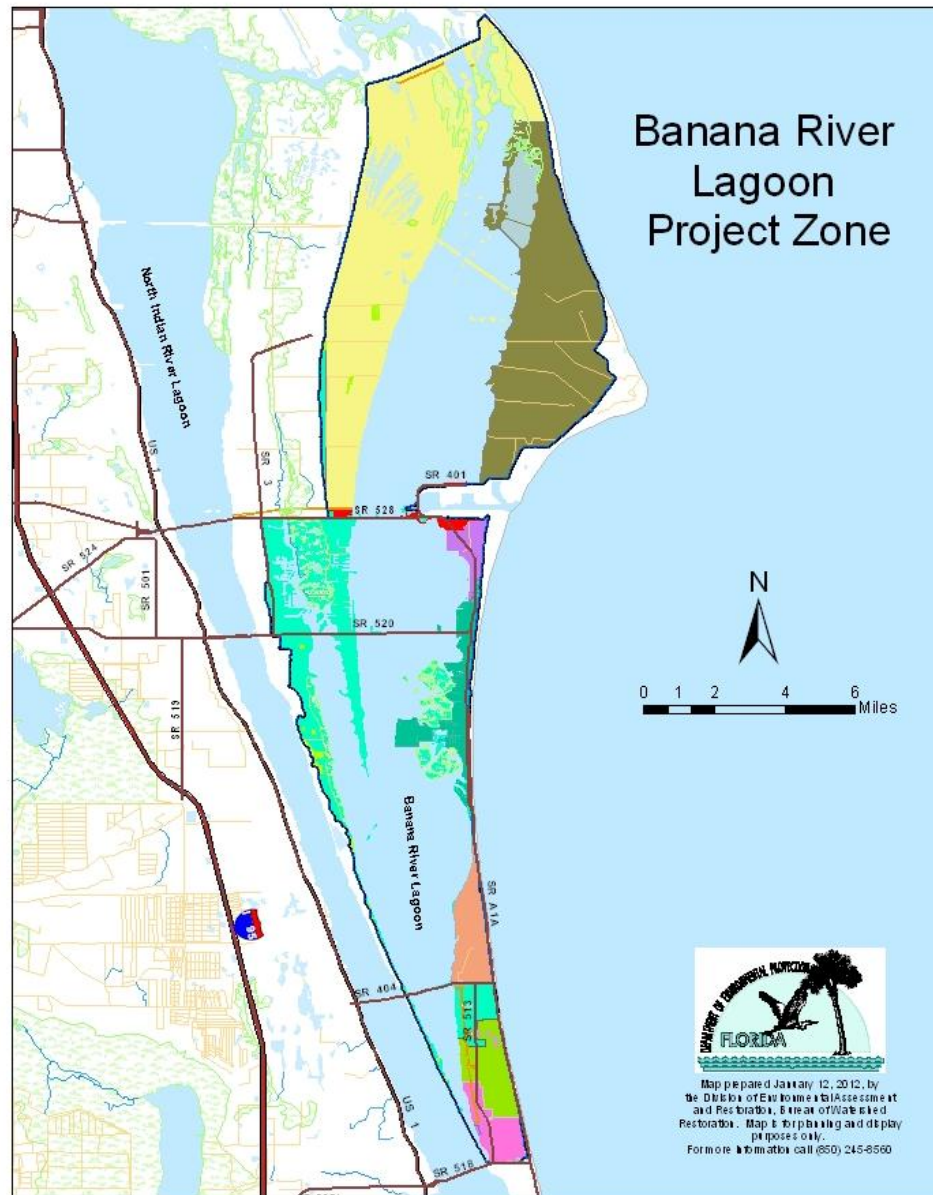
BMAP Approach, continued

- The IRL Basin was divided into three subbasins with separate BMAPs:
 - Central IRL;
 - North IRL; and
 - Banana River Lagoon.





Banana River Lagoon Project Zone



Legend

- | | | | |
|----------------|----------------------|-----------------|----------------------|
| Canals/ditches | Brevard County | Cape Canaveral | Indian Harbour Beach |
| Water | Port Canaveral | Cocoa Beach | Melbourne |
| Wetlands | Kennedy Space Center | Patrick AFB | |
| Agriculture | Cape Canaveral AFS | Satellite Beach | |



Map prepared January 12, 2012, by
the Division of Environmental Assessment
and Restoration, Bureau of Wetland
Restoration. Map is for planning and display
purposes only.
For more information call (850) 245-8560



Stakeholders in the BRL BMAP

- **WWTFs**
 - Cape Canaveral
 - Cocoa Beach
 - Morton Salt
- **Non-MS4s**
 - Cape Canaveral Air Force Station
 - Kennedy Space Center
- **MS4s:**
 - Brevard County
 - City of Cape Canaveral
 - City of Cocoa Beach
 - City of Indian Harbour Beach
 - City of Satellite Beach
 - FDOT District 5
 - Patrick Air Force Base
- **Environmental Interests**





Seagrass Deep Limit Target

- Goal of TMDLs is to recover the deeper-water seagrass habitats. There is a water depth target for the Banana River Lagoon.
- Response of seagrasses to reductions in nutrient loadings is the most important factor for evaluating the success of the TMDLs.
- Success of TMDL is based on growth of seagrass at target depths. Success can be attained without meeting full nutrient loading reductions specified in TMDLs.





Questions on the BMAP

- **Allocation Stakeholders:**
 - Brevard County
 - City of Cape Canaveral
 - City of Cocoa Beach
 - City of Indian Harbour Beach
 - City of Satellite Beach
 - Cape Canaveral Air Force Station
 - FDOT District 5
 - Kennedy Space Center
 - Morton Salt
 - Patrick Air Force Base
- **Other Interested Parties**





Banana River Lagoon BMAP Progress to Date



<http://www.irclibrary.org/>

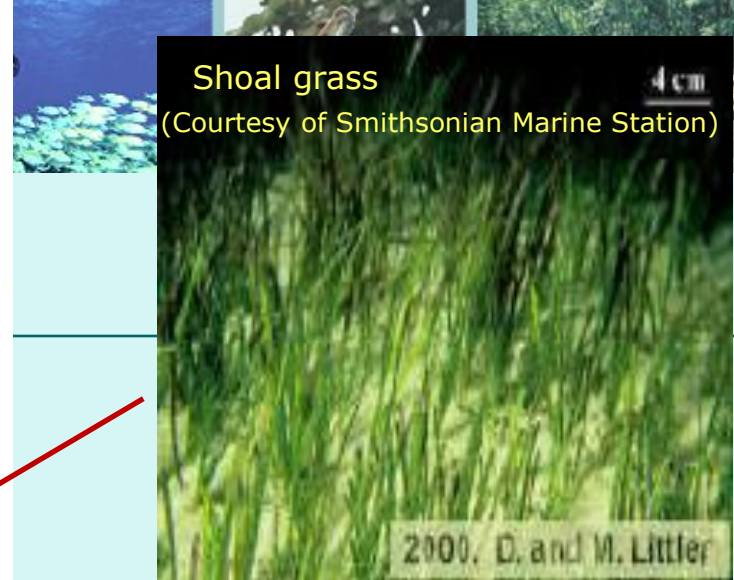
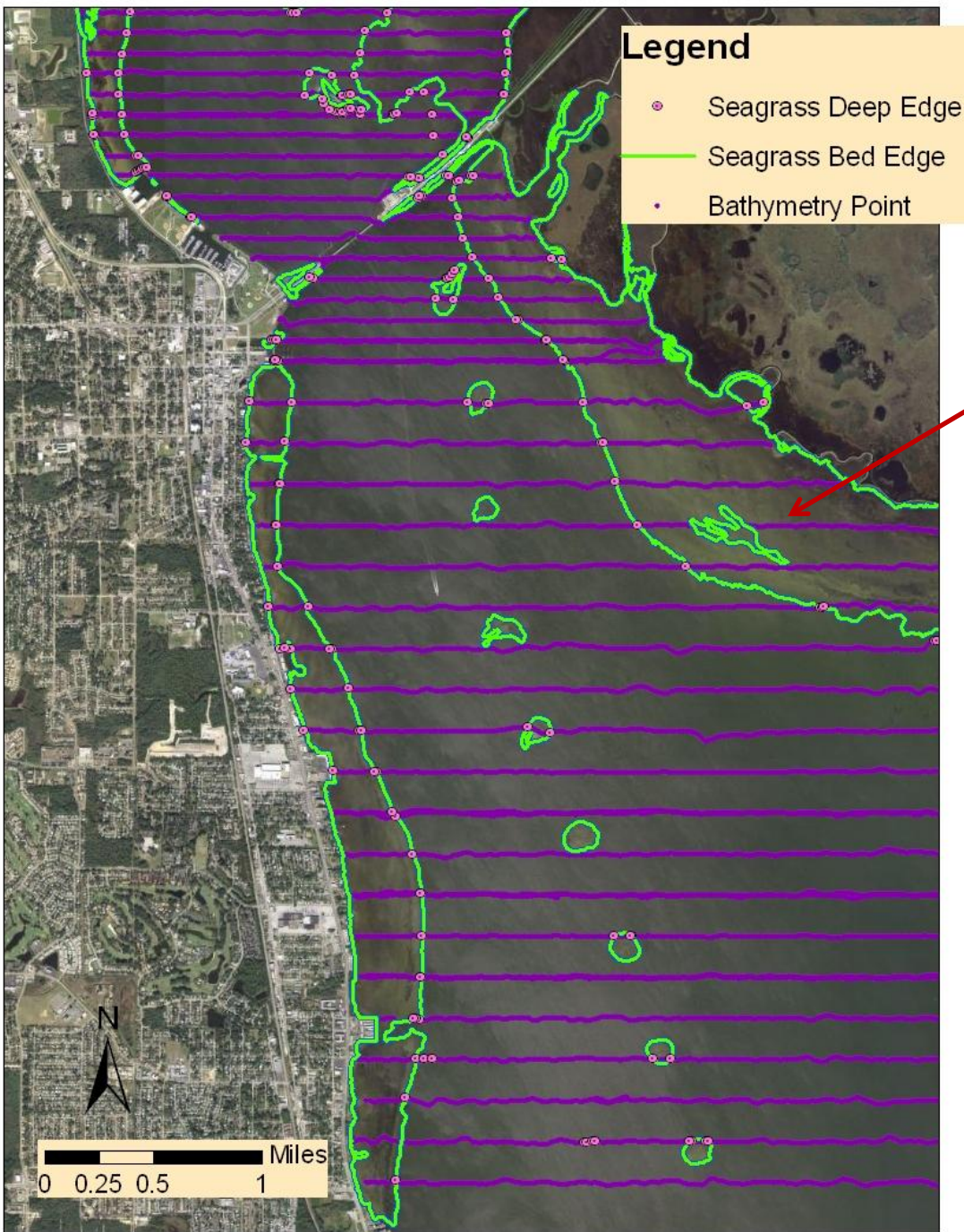




Establishing the Deep Edge of Seagrass Beds

- The four most recent mapped seagrass datasets (2003, 2005, 2006, and 2007) were joined to create a combined map or coverage in Geographic Information Systems (GIS).
- A 15 meter buffer zone was applied to the perimeter of the coverage to create the deep edge of the seagrass beds.
- This buffered coverage shows the deepest edge that seagrass grew at any time during the data period for the Banana River Lagoon.
 - Not species specific





*What is
the
Deep Edge
of Seagrass?*

**Dataset of bathymetry
points that intersect
seagrass bed**



Evaluation Steps for TMDL Compliance

- TMDL compliance is evaluated over 4 year's of seagrass data.
- The determination of TMDL compliance is a two-step evaluation method:

Step 1: For each project zone, a cumulative frequency distribution of the seagrass beds deep edge depth data is created for the evaluation years (2003-2007). The evaluation period distribution is compared to the TMDL period frequency distribution (1943-1999).





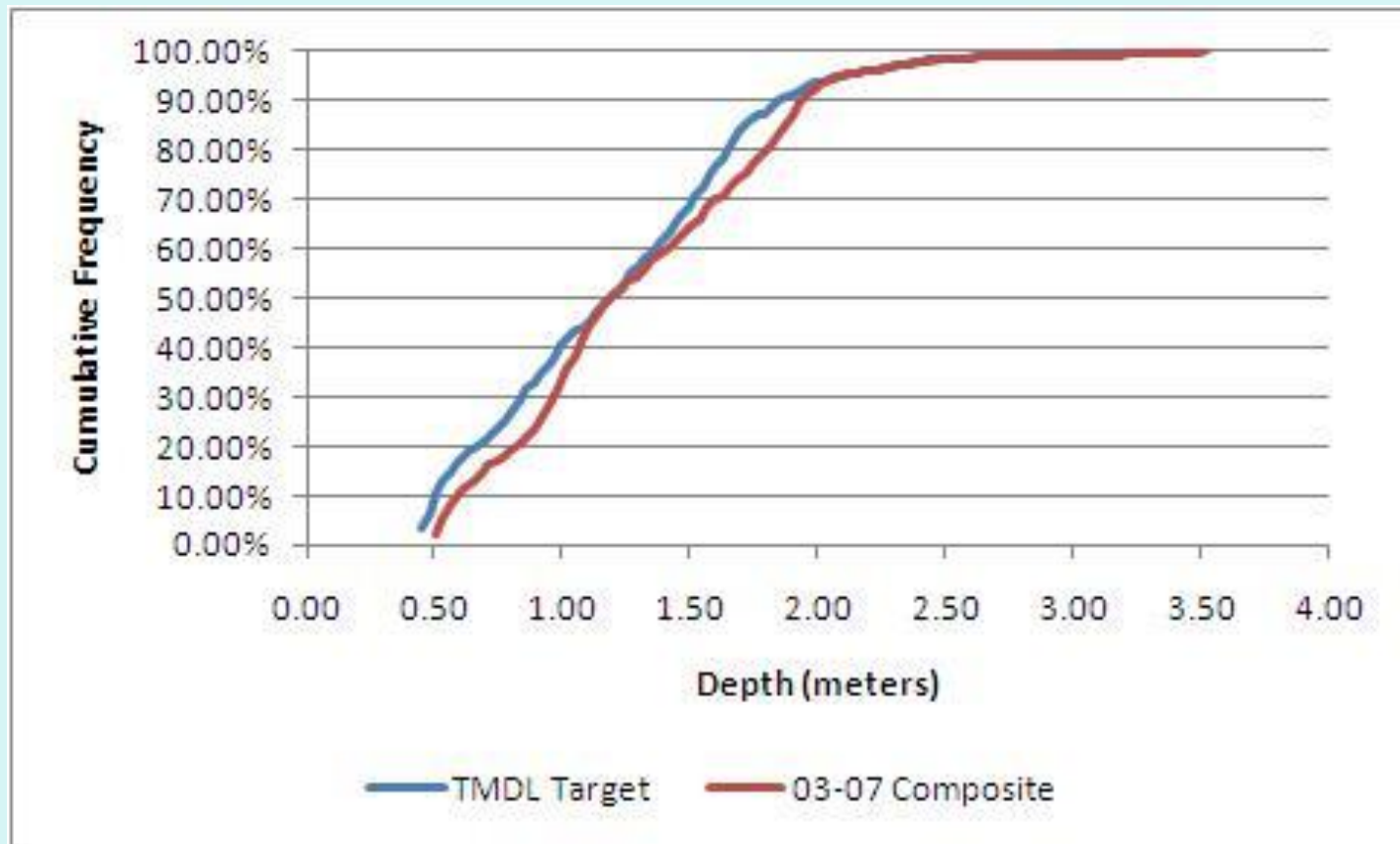
TMDL Compliance: Step 1

- **More than 50% of** the combined evaluation year's distribution curve must lie on or to the right of the TMDL curve to meet Step 1 compliance.





Banana River Lagoon



The 2003-2007 curve (red line) is on or to the right of the TMDL curve (blue line) more than 50% of the time. Therefore, BRL is Step 1 compliant.





TMDL Compliance: Step 2

- **Step 2:** The median depth limit value is determined for each mapping year from the cumulative frequency distribution.
- Each mapping year's median depth:
 - **Must meet or exceed the TMDL median depth limit target.** Advantage is that **one** exceptional year does not overpower other years.





TMDL Compliance: Step 2 cont.

- Three of the four annual medians must meet or exceed the median TMDL depth limit target for a project zone to be Step 2 compliant.
 - One year with less seagrass does not prevent compliance.



Step 2 Compliance Summary

- Three out of the four mapping years in BRL did not meet or exceed the TMDL median. BRL is not Step 2 compliant.

Year	BRL
TMDL Median	1.19
2003	1.11
2005	1.11
2006	1.14
2007	1.17
Step 2 Compliant?	No





Evaluating Compliance in the Future

- Reductions are required because seagrass beds are not meeting the TMDL depth targets.
- Stakeholders will be required to achieve 15% TN and TP reductions in this first five-year BMAP period.
- In year four of the BMAP, TMDL depth limit targets will be reassessed using 2007, 2009, 2011, and 2013 mapping data. This creates a new 4 year evaluation period.





Evaluating Compliance in Future, cont

- If Banana River Lagoon **is compliant using the 2007-2013 mapping years**, FDEP will not ask stakeholders to make additional TN and TP reductions in the next iteration of the BMAP.
- If the Banana River Lagoon **is not compliant at this time**, additional reductions will be required in the second iteration of the BMAP.





Calculating Allocations

- The following slides outline how allocations for reductions of TP and TN loadings were calculated for individual stakeholders.
- Some important terms to understand
 - Baseline loading
 - Allocation (allowable loading)
 - Percent reduction





Allocations - Baseline Loads

- Baseline loads or starting loads are calculated based on year 2000 landuses using the PLSM model loading output.
- The PLSM model is a GIS based model that uses landuse, rainfall, nutrient-landuse relations, and soil data to calculate loadings.
- Loadings from water are removed from the datasets. This includes the Banana River Lagoon proper.





Calculating Baseline Loads, cont.

- Baseline loading datasets are created in the following order:
 - Florida Department of Transportation (FDOT) roads and right-of-ways.
 - Areas with agricultural land uses.
 - Municipalities and federal facilities, each to its own jurisdictional boundary.
 - The remaining area was assigned to Brevard County.





BRL Baseline TN Loads

Entity	Area (acres)	TN Baseline (lbs/yr)	TN Water Land Use Load (lbs/yr)	TN Net Load (lbs/yr)
Agriculture	231	1,361	-	1,361
Brevard County	10,365	74,447	6,097	68,350
Cape Canaveral	857	8,976	1	8,975
Cape Canaveral Air Force Station (AFS)	13,801	53,029	85	52,944
Cocoa Beach	1,842	18,616	97	18,519
FDOT 5	559	5,477	20	5,457
Indian Harbour Beach	1,244	11,800	225	11,575
Kennedy Space Center	18,545	70,837	727	70,110
Melbourne	4	30	-	30
Patrick Air Force Base (AFB)	1,835	24,897	334	24,563
Port Canaveral	333	1,430	158	1,272
Satellite Beach	1,737	17,572	327	17,245
U.S. Army Corps of Engineers (USACE)	30	165	-	165
Total	51,383	288,637	8,071	280,566





BRL Baseline TP Loads

Entity	Area (acres)	TP Baseline (lbs/yr)	TP Water Land Use Load (lbs/yr)	TP Net Load (lbs/yr)
Agriculture	231	340.0	-	340.0
Brevard County	10,365	14,776.8	574.0	14,202.8
Cape Canaveral	857	2,031.4	0.2	2,031.2
Cape Canaveral AFS	13,801	11,089.9	16.5	11,073.4
Cocoa Beach	1,842	3,845.7	22.2	3,823.5
FDOT 5	559	1,707.7	3.3	1,704.4
Indian Harbour Beach	1,244	2,143.3	22.1	2,121.2
Kennedy Space Center	18,545	8,969.2	104.1	8,865.1
Melbourne	4	5.5	-	5.5
Patrick AFB	1,835	6,508.6	41.4	6,467.2
Port Canaveral	333	209.1	13.3	195.8
Satellite Beach	1,737	3,342.6	29.1	3,313.5
USACE	30	33.5	-	33.5
Total	51,383	55,003.3	826.2	54,177.1





BRL de minimus Loads

- Those entities whose total loads are very small in relation to the total loads (less than 1%) for *both* TN and TP are considered *de minimus*.
- Four entities met the *de minimus* requirements:
 - Agriculture
 - Melbourne
 - Port Canaveral
 - U.S. Army Corps of Engineers
- Combined, their loads were approximately 1% of the total loads for both TN and TP.
- The *de minimus* load was not reassigned to other stakeholders for reductions.





Target Loads per Acre

- The target loads per acre were calculated by dividing the TMDL target load for nonpoint sources by the total non-lagoon area in BRL.
- Preliminary allocations were determined based on these target loads per acre.

Category	TN	TP
Non-lagoon acres	51,383	51,383
TMDL Target Load (lbs)	104,642	17,697
Target Load (lbs/acre)	2.04	0.344





TMDL Entity Allocations

- Each entity's allocation or allowable loading is calculated by multiplying total acres by the target load per acre.
- *De minimus* entities receive no allocation.
- Required reductions for each entity are calculated by subtracting the entity's allocation from their net load.





Considerations

- The required TN reduction for Kennedy Space Center appeared large given the high proportion of undeveloped lands within this facility.
- As a comparison, the loads for the undeveloped areas in the basin were calculated (these do not include water loads).





Interim Target Load per Acre

- Due to the large percentage of undeveloped area in this basin, FDEP is implementing an interim TN target for the first iteration of the BMAP.
- The interim target is 2.08 lbs/acre/yr (except for Kennedy Space Center), the overall average baseline load from undeveloped land for the BRL.
- The interim TN target for Kennedy Space Center is 2.83 lbs/acre/yr, its baseline load from undeveloped land.
- The TMDL target TP load of 0.344 lbs/acre/yr is retained.





Required Reductions

- The required reductions will be spread out over a 15-year period.
- For the first iteration of the BMAP, 15% of the required reductions must be achieved.
- This allows for some reductions to occur while providing time to see how seagrass has responded to nutrient reductions.





BMAP Phase 1 TN Reductions

Entity	Area (acres)	TN Target (lbs/acre/yr)	TN Target (lbs/yr)	Water Land Use Loads Set Aside (lbs/yr)	Net Load (lbs/yr)	Required Reduction (lbs/yr)	15% BMAP 1 Required Reduction (lbs/yr)
Brevard County	10,365	2.08	21,567	6,097	68,350	46,783	7,017.5
Cape Canaveral	857	2.08	1,784	1	8,975	7,191	1,078.7
Cape Canaveral AFS	13,801	2.08	28,717	85	52,944	24,227	3,634.1
Cocoa Beach	1,842	2.08	3,834	97	18,519	14,685	2,202.8
FDOT 5	559	2.08	1,163	20	5,457	4,294	644.1
Indian Harbour Beach	1,244	2.08	2,588	225	11,575	8,987	1,348.1
Kennedy Space Center	18,545	2.83	52,542	727	70,110	17,568	2,635.2
Patrick AFB	1,835	2.08	3,819	334	24,563	20,744	3,111.6
Satellite Beach	1,737	2.08	3,614	158	17,245	13,631	2,044.7
<i>de minimus</i>	598	-	2,828	327	2,828	-	0.0
Total	51,383	-	119,627	8,071	280,566	158,111	23,716.5





BMAP Phase 1 TP Reductions

Entity	Area (acres)	TP Target (lbs/acre/yr)	TP Target (lbs/yr)	Water Land Use Loads Set Aside (lbs/yr)	Net Load (lbs/yr)	Required Reduction (lbs/yr)	15% BMAP 1 Required Reduction (lbs/yr)
Brevard County	10,365	0.344	3,570	574.0	14,203	10,633	1,595.0
Cape Canaveral	857	0.344	295	0.2	2,031	1,736	260.4
Cape Canaveral AFS	13,801	0.344	4,753	16.5	11,073	6,320	948.0
Cocoa Beach	1,842	0.344	635	22.2	3,824	3,189	478.4
FDOT 5	559	0.344	192	3.3	1,704	1,512	226.8
Indian Harbour Beach	1,244	0.344	428	22.1	2,121	1,693	254.0
Kennedy Space Center	18,545	0.344	6,387	104.1	8,865	2,478	371.7
Patrick AFB	1,835	0.344	632	41.4	6,467	5,835	875.3
Satellite Beach	1,737	0.344	598	13.3	3,314	2,715	407.3
<i>de minimus</i>	598	-	575	29.1	575	0	0.0
Total	51,383	-	18,066	826.2	54,177	36,111	5,416.7





Types of Projects Eligible for Credit

- Completed projects since January 1, 2000 were eligible for credit because the land uses in the TMDL model are circa 2000.
- Projects were only given credit for the load reduction that was over and above any permit requirements for that project.
 - Permit conditions are established to maintain the current condition (prevent further impacts from the development) and do not contribute to the improvement of water quality in the lagoon.





Types of Projects, continued

- Standard stormwater treatment best management practices (BMPs):
 - Retention BMPs;
 - Wet detention ponds;
 - Dry detention;
 - Baffle boxes;
 - Nutrient (2nd generation) baffle boxes;
 - Catch basin inserts/inlet filters;
 - Swales;
 - Alum injection;
 - Stormwater reuse;
 - Stormceptor units;
 - Continuous deflective separation (CDS) units;
 - Street sweeping; and
 - Treatment trains using a combination of BMPs.





Types of Projects, continued

- Provisional credit is assigned for:
 - Floating islands/ managed aquatic plant systems (MAPS); and
 - Public education and outreach efforts.
- Other potential projects:
 - Muck/sediment removal;
 - Vegetation and algal harvesting; and
 - Tilting weir gates in canals.





Questions on the BMAP Progress

- Allocation Stakeholders:
 - Brevard County
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 - City of Cocoa Beach
 - City of Indian Harbour Beach
 - City of Satellite Beach
 - Cape Canaveral Air Force Station
 - FDOT District 5
 - Kennedy Space Center
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 - Patrick Air Force Base
- Other Interested Parties





Next Steps



Courtesy of Robert Day



Project Collection

- Project credit was calculated and presented to the stakeholders at the September BRL technical meeting.
 - This credit is shown in the tables on the following slides.
- The second round of project collection was completed in December.
 - FDEP is in the process of calculating credit for these projects and will present this information at the next BRL technical meeting.





TN Credit for Submitted Projects

Entity	15% BMAP 1 TN Required Reduction (lbs/yr)	Completed Project TN Credit (lbs/yr)	TN Reduction Remaining (lbs/yr)
Brevard County	7,017.5	3,969.0	3,048.5
Cape Canaveral	1,078.7	1,234.0	-155.3
Cape Canaveral AFS	3,634.1	864.0	2,770.1
Cocoa Beach	2,202.8	1,041.0	1,161.8
FDOT District 5	644.1	216.0	428.1
Indian Harbour Beach	1,348.1	91.0	1,257.1
Kennedy Space Center	2,635.2	5,101.0	-2,465.8
Patrick AFB	3,111.6	213.0	2,898.6
Satellite Beach	2,044.7	1,256.0	788.7



Highlighted means more than 15% reduction achieved



TP Credit for Submitted Projects

Entity	15% BMAP 1 TP Required Reduction (lbs/yr)	Completed Project TP Credit (lbs/yr)	TP Reduction Remaining (lbs/yr)
Brevard County	1,595.0	907.8	687.2
Cape Canaveral	260.4	405.4	-145.0
Cape Canaveral AFS	948.0	388.9	559.1
Cocoa Beach	478.4	375.4	103.0
FDOT District 5	226.8	74.1	153.3
Indian Harbour Beach	254.0	15.1	238.9
Kennedy Space Center	371.7	1,386.5	-1,014.8
Patrick AFB	875.3	57	818.3
Satellite Beach	407.3	241.2	166.1

Highlighted means more than 15% reduction achieved





Monitoring Plan Development

- BMAP requires a monitoring plan.
- Plan identifies how we will measure success in achieving TMDLs.
 - **Goals and objectives** for monitoring
 - Identifies **sampling locations** and **analytes measured**
- Seagrass mapping is major component of monitoring plan.
 - DEP 2013 mapping of IRL seagrasses
 - Mapping requires aerial photography
 - Considering remote sensing techniques
- DEP and SJRWMD preparing strawman.





Production of the BMAP Document

- Time line for completion of key tasks
 - Finish project collection – **April 2012**
 - Determine crediting of Other type projects – **May/June 2012**
 - Draft monitoring plan – **June-July 2012**
- Drafting of BMAP document
 - Goals and objectives – **summer 2012**
 - Draft document – **fall 2012**
 - **Final Draft – early 2013**





BMAP Adoption Process

- Opportunity for **review of BMAP** – 30 days
- **Support of plan** by stakeholders
 - Letter/statement of commitment
 - Resolution from local government
- **Future Public briefings/meetings**
 - Today's meeting is the first
 - At least one more policy briefing
 - Public meeting / Workshop on BMAP
 - Individual presentations to local governments or others as requested.





BMAP Adoption, continued

- Adoption of plan by Secretarial Order.
- Follows Chapter 120, F.S. requirements for noticing of DEP action.
- Final Order noticed for 21 days.
 - Allows for public comment and challenge
 - Publicized in each county's local paper





Questions on the Next Steps

- Allocation Stakeholders:
 - Brevard County
 - City of Cape Canaveral
 - City of Cocoa Beach
 - City of Indian Harbour Beach
 - City of Satellite Beach
 - Cape Canaveral Air Force Station
 - FDOT District 5
 - Kennedy Space Center
 - Morton Salt
 - Patrick Air Force Base
- Other Interested Parties





Public Comment



<http://www.sjrwmd.com/itsyourlagoon/index.html>





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