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CAPE COD
COMMISSION

Minutes

Meeting of Cape Cod Commission

October 16, 2014

The meeting was convened at 3:00 p.m., and the Roll Call was recorded as follows:

Town	Member	Present
Barnstable	Royden Richardson	✓ (<i>arrived at 3:40 pm</i>)
Bourne	Michael Blanton	Absent
Brewster	Elizabeth Taylor	✓
Chatham	Michael Skelley	Absent
Dennis	Richard Roy	✓
Eastham	Joy Brookshire	Absent
Falmouth	Andrew Putnam	✓
Harwich	Jacqueline Etsten	✓
Mashpee	Ernest Virgilio	✓
Orleans	Len Short	✓
Provincetown	Austin Knight	✓
Sandwich	Harold Mitchell	✓
Truro	Kevin Grunwald	Absent
Wellfleet	Roger Putnam	✓
Yarmouth	John McCormack, Jr.	✓
County Commissioner	Mary Pat Flynn	✓
Minority Representative	John Harris	✓
Native American Rep.	Vacant	Vacant
Governor's Appointee	Vacant	Vacant

The meeting of the Cape Cod Commission was called to order on Thursday, October 16, 2014 at 3:00 p.m. in the First District Courthouse, Assembly of Delegates Chambers, Barnstable, MA. Roll was called and a quorum established.

■ SUMMARY OF ACTIONS TAKEN/VOTES:

Public Hearing: Bourne Solar Project—53 MacArthur Boulevard, Bourne, MA

Following the presentations and discussion, the Full Commission voted unanimously to adopt the draft written Limited Development of Regional Impact (DRI) decision as written and approved the Bourne Solar Project with conditions set out in the draft Limited DRI decision.

Section 208 Draft Area-wide Water Quality Management Plan

Executive Director Paul Niedzwiecki gave a presentation and provided an update on the Section 208 Draft Area-wide Water Quality Management Plan.

■ EXECUTIVE DIRECTOR'S REPORT

Paul Niedzwiecki said the Commission's communications team is putting together a training presentation for Commission members. He said they are trying to do it on-line as a curriculum and said it will be available to members. He said the Attorney General's office is hosting two webinars on the Open Meeting Law and it can be accessed from home computers. He said it will be aired in the Commission's large conference room on October 21 for anyone interested in attending and asked members to contact Jessica Wielgus, Commission Counsel, if they want more information. He said the Commission has been interviewing for a Regulatory Officer II position and a Hydrologist position and said they have had good candidates for both positions. He said he was invited to sit on the Cape Cod Canal Transportation Study Committee and he will report back to the Commission after their meeting in November. He said Hydro, Inc. was recently recognized and named Southeast Division Gold Winner in the 11th Annual Massachusetts Economic Impact Awards. He congratulated Hydro and said the Commission recommended Hydro for the award and he is happy that the Commission was part of that story. He said the regional-wide network is up and running, many towns have already connected to that network, and e-Permitting is part of that regional connection. He said the Commission was recognized by the Association to Preserve Cape Cod (APCC) last week for the Commission's work on the Section 208 Plan and said APCC presented the Commission with the Paul Tsongas Award for Excellence.

■ MINUTES

The minutes of the October 2, 2014 Commission Meeting were reviewed. Austin Knight moved to approve the minutes. Roger Putnam seconded the motion. The motion passed with a unanimous vote.

■ BOURNE SOLAR PROJECT

Chair Richard Roy noted that this is a continued hearing from October 2, 2014.

Ernest Virgilio, subcommittee chair, called for a motion by the subcommittee to approve the minutes of the October 2, 2014 public hearing. John Harris moved to approve the minutes. Harold Mitchell seconded the motion. The minutes were unanimously approved by the subcommittee.

Brian Madden, LEC Environmental Consultants, representing the applicant described the project as the installation of a 7.85-acre, 2-MW solar field on a 25.14-acre site. He said the project has gone through extensive review with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) and received approval of their Long-Term Habitat Management Plan. He described the existing site topography and said 47,520 square feet of a buffer zone will be protected by a Conservation Restriction that will permanently protect important species and wetland areas. He said a Curb Cut and Traffic Management Plan has been approved by MassDOT. He said the proposed project furthers the goal of Bourne's Local Comprehensive Plan and the applicant will purchase a Power Purchase Agreement with the Bourne Recreation Authority that will be signed next week.

Jeffrey Ribeiro, Regulatory Officer at the Commission, with the use of PowerPoint slides described the project as a 25.14-acre site of which 7.85-acres will be developed for a 2-MW solar field, there is a .44-acre gravel drive and there are wetlands on the west side of the site. He explained the Commission's jurisdiction and said the subcommittee approved and adopted the scoping decision for the project on September 4, 2014. He said the scoping decision limits Development of Regional Impact (DRI) review to issue areas for water resources, wetlands, wildlife/plant habitat, open space, and waste management. Mr. Ribeiro then provided an overview of the Limited DRI findings and RPP consistency in each of the issue areas scoped for review. He said the proposed Bourne Solar Project is consistent with local development bylaws provided all local permits are obtained, it is consistent with the Bourne Local Comprehensive Plan (LCP) and there are no Districts of Critical Planning Concern in the project site with the exception of the Cape-wide Fertilizer Management DCPC. He described project benefits as a Conservation Restriction (CR) on 16.79 acres protecting wetland areas, habitat and invasive species management, no wastewater or water withdrawal, a Purchase Power Agreement (PPA) with the Bourne Recreation Authority, and it's a renewal energy project consistent with state and local goals. He said a project detriment is the loss of 8.38 acres of forested upland. Mr. Ribeiro said with conditions the project complies with Minimum Performance Standards (MPSs) in the applicable issue areas, it complies with local bylaws and the Bourne LCP, and the project benefits outweigh the project detriments. He said as conditioned the project shall be built according to the approved plan set, the DRI Scoping decision terms and conditions have been incorporated into the Limited DRI decision, and the applicant will execute a PPA consistent with LO1 prior to the issuance of a Preliminary Certificate of Compliance (CoC). He said in regard to water resources the applicant must provide certification of a stormwater system after one year; for open space a draft CR must be provided prior to a Preliminary CoC and an executed CR prior to a Final CoC; and for waste management the applicant must comply with the protocol provided.

Mary Pat Flynn inquired about the curb cut and asked if there was a slow-down area as well.

Jeffrey Ribeiro explained that the applicant received approval for the curb cut. He said it does not have a slow-down area. He said there is a wide shoulder in that area of the road where vehicles can safely pull over.

Elizabeth Taylor inquired about habitat management and asked if someone would be going in to inspect the area before any clearing is done. She asked if much clearing would be done or just woody vegetation.

Jeffrey Ribeiro said a turtle sweep is being done today. He said there are exhaustive regulations in the management plan and the Commission would be monitoring that. He said extremely limited work will be done.

Brian Madden said 8.38 acres would be enclosed by turtle barriers and they have been working to sweep the area. He said they would be removing the turtles from harm's way. He said there is also a time schedule in the management plan for mowing.

Elizabeth Taylor said it's a good area for turtles laying eggs there.

Jeffrey Ribeiro said they are aware of that.

Ernest Virgilio said he appreciates Ms. Taylor's concern and said in construction today protective measures are taken and something will be done that is protective there as well.

Jackie Etsten inquired about the life span of the solar field and asked what measures are in place should it become damaged or obsolete.

Brian Madden said the life span is 20-30 years and the town requires a bond for decommissioning.

Roger Putnam inquired about financial benefits to the town.

Jeffrey Ribeiro said they would receive 11 cents per kW hour and the rate would be locked in for 10 years. He said the Power Purchase Agreement would need to be executed before a preliminary certificate of compliance is issued.

Austin Knight moved to close the public hearing. Elizabeth Taylor seconded the motion. The motion passed with a unanimous vote.

Jack McCormack said he was an alternate on the subcommittee and it's a great project.

Ernest Virgilio moved that the Commission adopt the draft Limited DRI decision as written and approve the Bourne Solar Project with conditions set out in the draft Limited DRI decision. Elizabeth Taylor seconded the motion. The motion passed with a unanimous vote.

Ernest Virgilio said he chaired the subcommittee and thought the review process was extremely well done by everyone involved.

■ SECTION 208 DRAFT AREA-WIDE WATER QUALITY MANAGEMENT PLAN UPDATE

Paul Niedzwiecki provided an update on the Section 208 Draft Area-wide Water Quality Management Plan with the use of a PowerPoint slide presentation. Mr. Niedzwiecki complimented the Commission on the quality of its staff and said they have done a tremendous amount of work on the 208 Plan. Mr. Niedzwiecki's PowerPoint presentation is attached to the minutes.

Austin Knight talked about paving that had been done in Provincetown. He said there was a difference between new and old pavement. He said the state and towns can look at that in regard to runoff. He said it does affect runoff and it could help. He said towns could perhaps change policies on paving and upgrade to today's technologies. He said it's costly initially but the long term affects are far greater.

Paul Niedzwiecki said Provincetown has piloted several techniques that the Commission is interested in. He said by mid-point in the calendar year the Commission should have a 208 plan, be part way through the review of the Regional Policy Plan, and have a new transportation plan.

Roger Putnam asked how Commission members could receive a copy of the draft 208 Plan. Paul Niedzwiecki said it's available on the Commission's website.

Royden Richardson agreed with the quality of the Commission staff. He said he appreciates the work that has been done on this project and today's presentation. He asked if anyone was thinking about capacity in terms of the population.

Paul Niedzwiecki said as far as nitrogen the Cape is over capacity and they are trying to fix it. He said we are limited in the choices that we have because of the Cape's geology.

Jack McCormack echoed Mr. Richardson's comments and said he appreciates the work of Commission staff as well. He inquired about aquaculture.

Paul Niedzwiecki said a lot of pioneering has been done especially in Wellfleet. He said there are different approaches depending on the town. He said it can help but it's not the only solution.

Len Short expressed concerns about vetting nationally on the alternatives.

Paul Niedzwiecki said sometimes it's hard to get a two-thirds vote at Town Meeting. He said sometimes people continually question and criticize the science and this process is meant to help. He said a sustained monitoring program is needed and the technologies matrix will only be changed after it has been vetted with experts.

Len Short said more and better marketing should be done and perhaps someone on the Commission staff should be that person to get the word out.

Paul Niedzwiecki said the Commission needs to get better at that and said sometimes it's hard to do because of criticisms. He said we need the tools first and hopefully it will help the Commission to be better communicators. He said the Commission is committed to finding a better way.

Mary Pat Flynn said she applauds staff for the technical process and the stakeholder process. She said it brought many people together and it helped them to understand the message and that was done through the stakeholder process. She said the most valuable piece to the 208 planning process was the community involvement.

Elizabeth Taylor inquired about meetings with Boards of Selectmen.

Paul Niedzwiecki said he would like all selectmen Cape-wide to meet together in one room to discuss this. He said the responsibility cannot fall on homeowners; homeowners are only doing what the state allows them to do. He said he is not sure Boards of Selectmen understand that and he believes they need to hear that.

Elizabeth Taylor suggested taking today's presentation to Boards of Selectmen again as new information has been made available since the beginning of this process.

■ OTHER BUSINESS

Richard Roy inquired about the status of the Regional Policy Plan process.

Paul Niedzwiecki said an update will be on a Commission meeting agenda sometime in November or December. He said the process will involve a much deeper analysis of the Cape and how the Commission should move forward.

A motion was made to adjourn at 5:05 p.m. The motion was seconded and voted unanimously.

Respectfully submitted,

Harold Mitchell, Secretary

List of Documents Used/Presented at the October 16, 2014 Commission Meeting

- Minutes of the October 2, 2014 Commission meeting.
- Handout material: October 16, 2014 Commission meeting agenda.
- Handout material: Bourne Solar Project Draft Limited DRI Decision.
- Material presented: PowerPoint presentation on the Bourne Solar Project presented by Commission staff.
- Material presented: PowerPoint presentation on the Draft 208 Area-wide Water Quality Management Plan Update presented by the Executive Director.



CAPE COD
COMMISSION

§208 PLAN

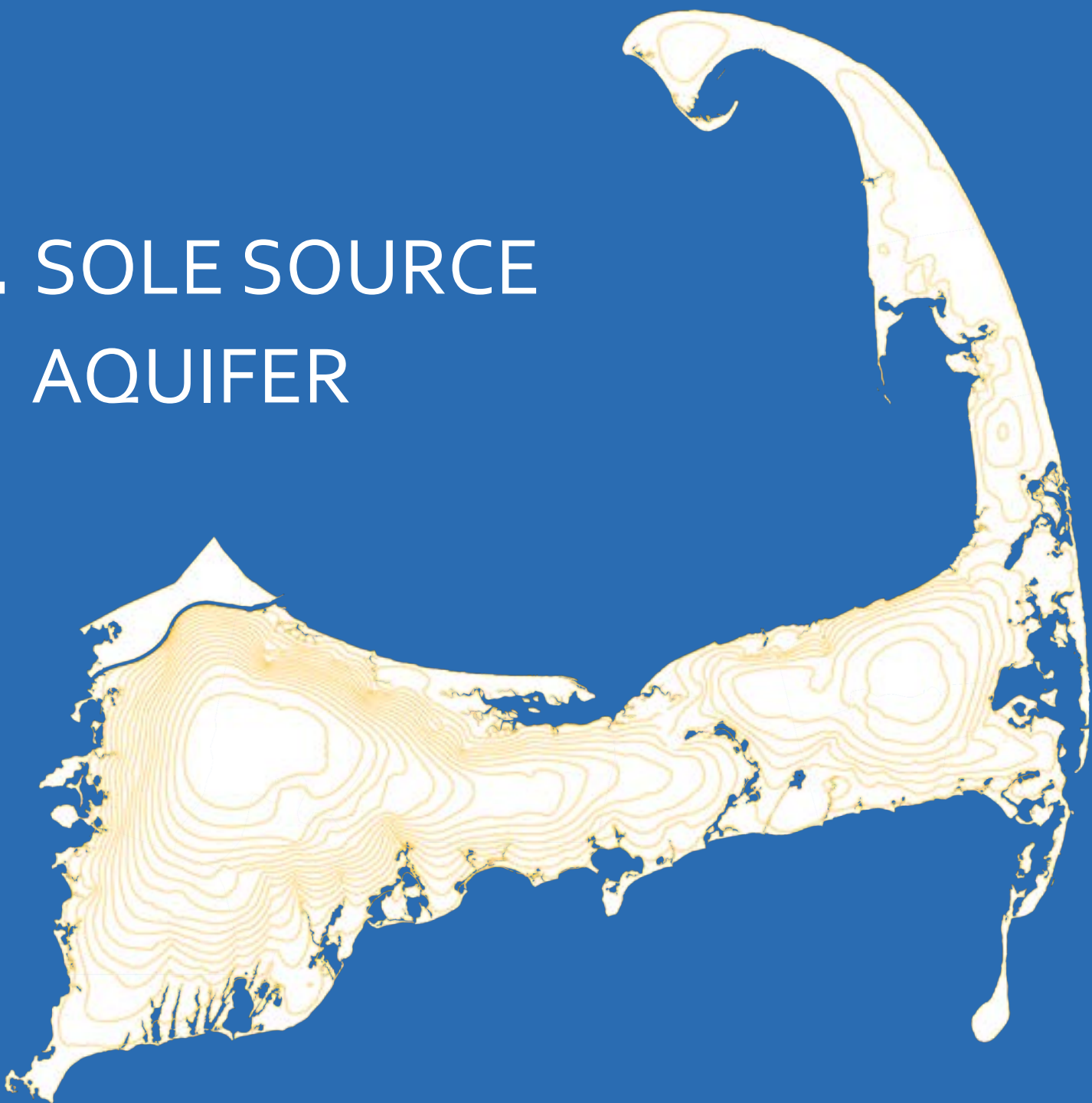
Cape Cod Commission
October 16, 2014





NITROGEN SENSITIVITY
ACTION IS REQUIRED

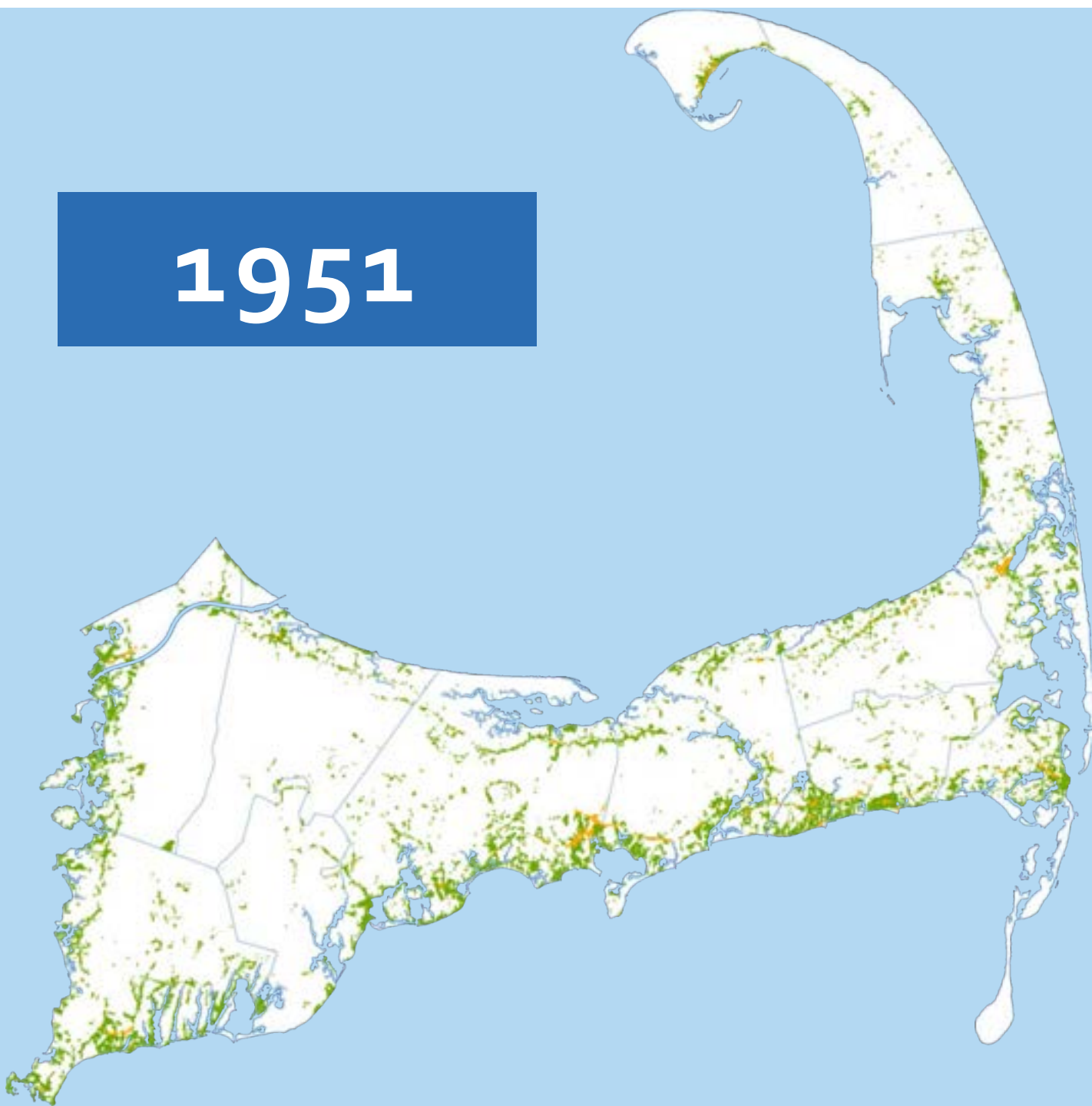
1 SOLE SOURCE AQUIFER



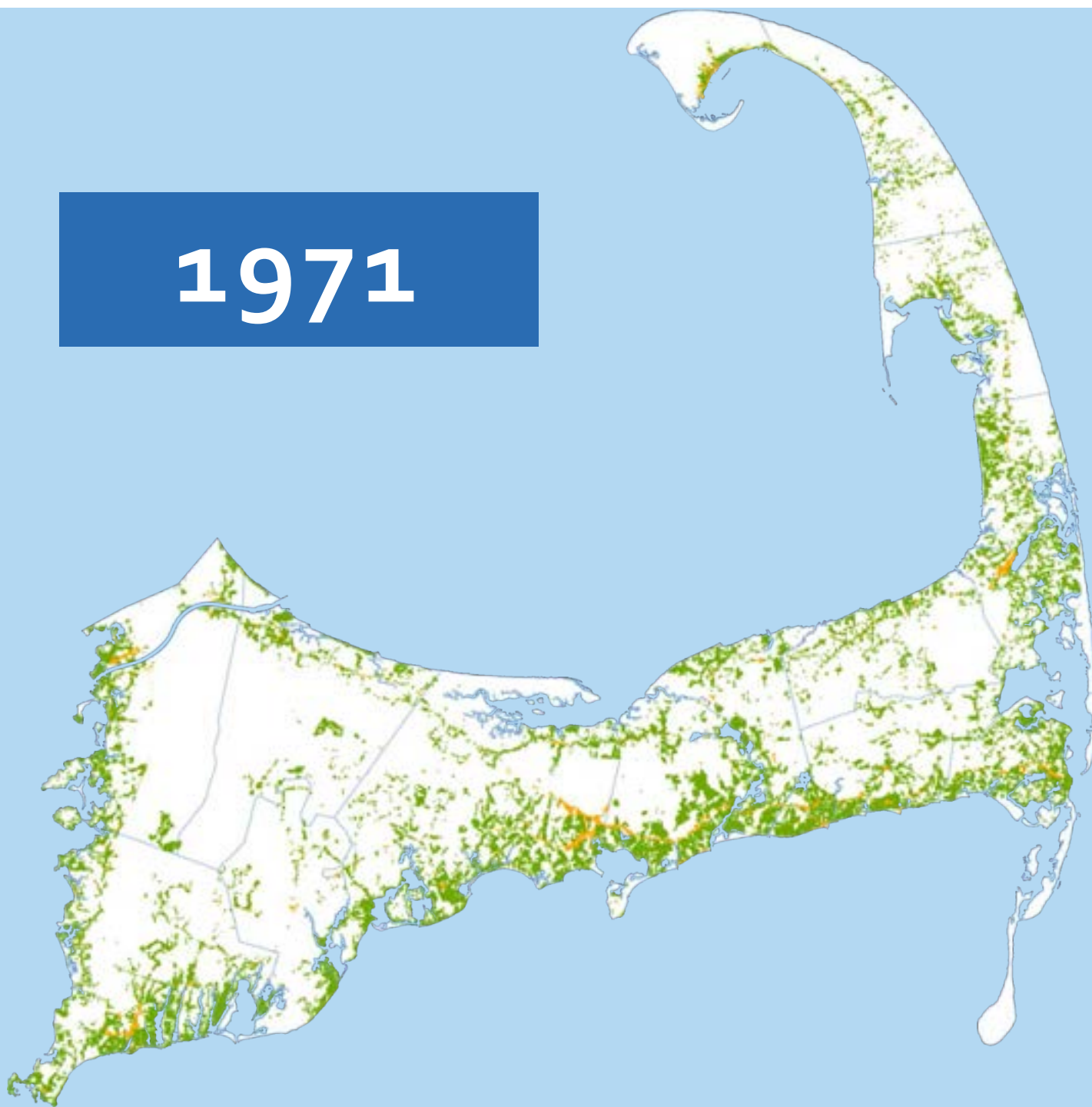
REGIONAL LAND USE



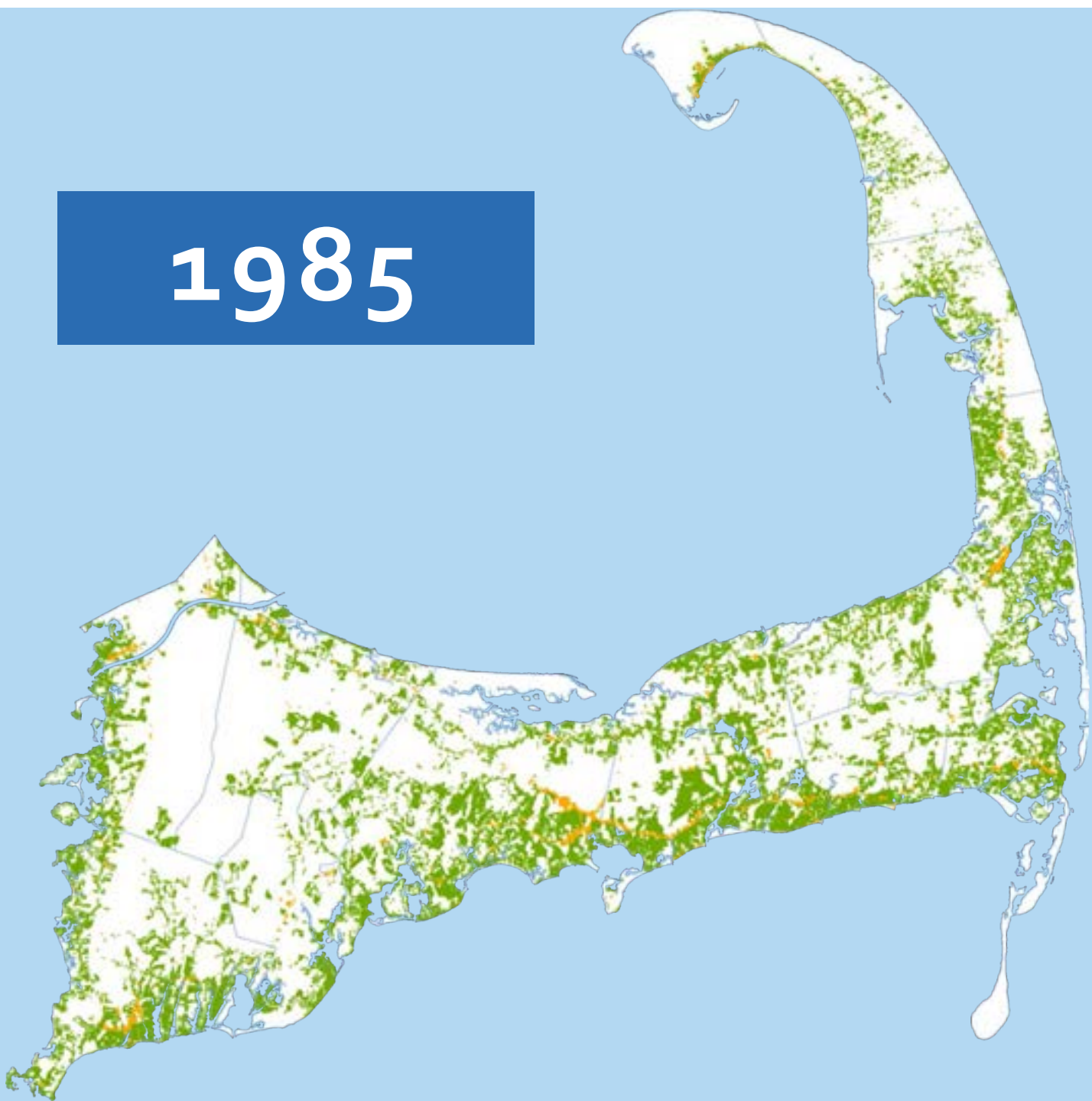
1951



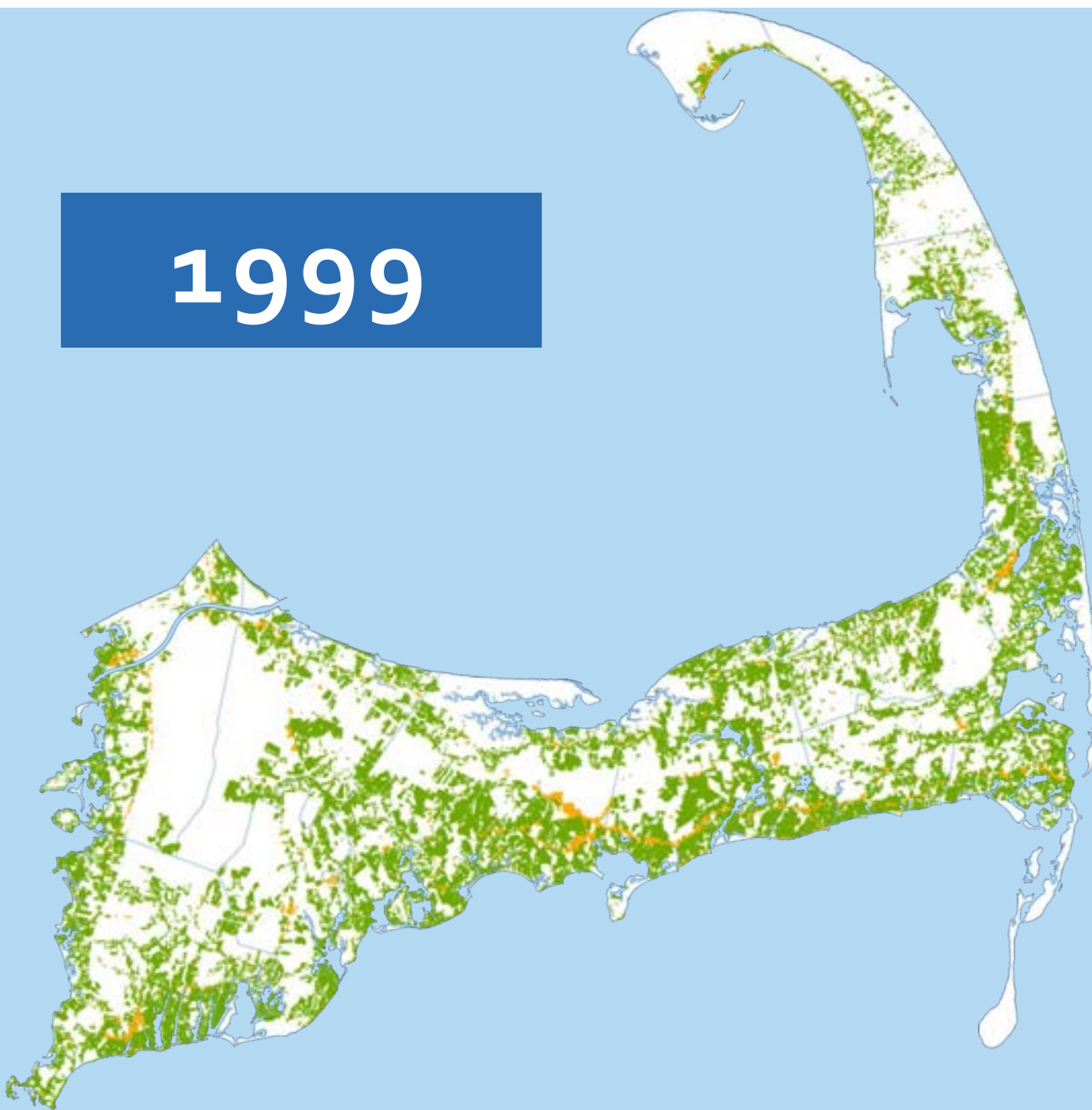
1971



1985



1999



2012



105 WATERSHEDS



57 EMBAYMENT WATERSHEDS



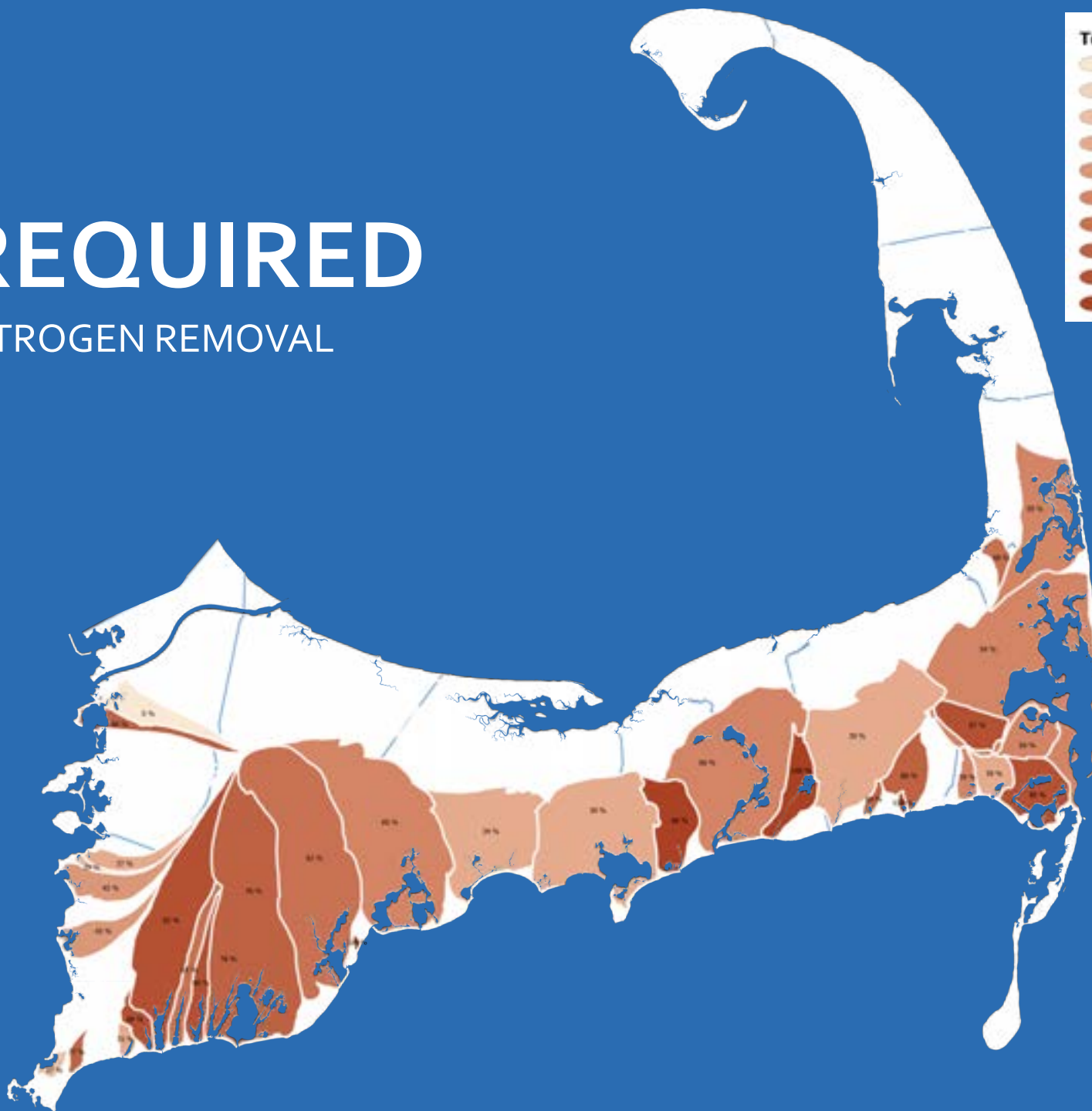
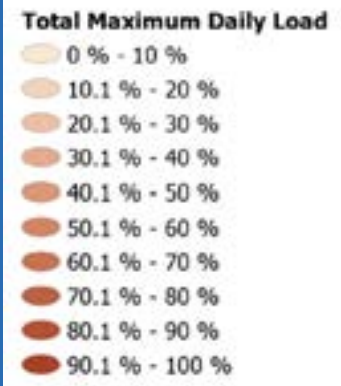
REGIONAL ISSUE

32 CROSSBOUNDARY WATERSHEDS



REQUIRED

NITROGEN REMOVAL





208 Plan Update



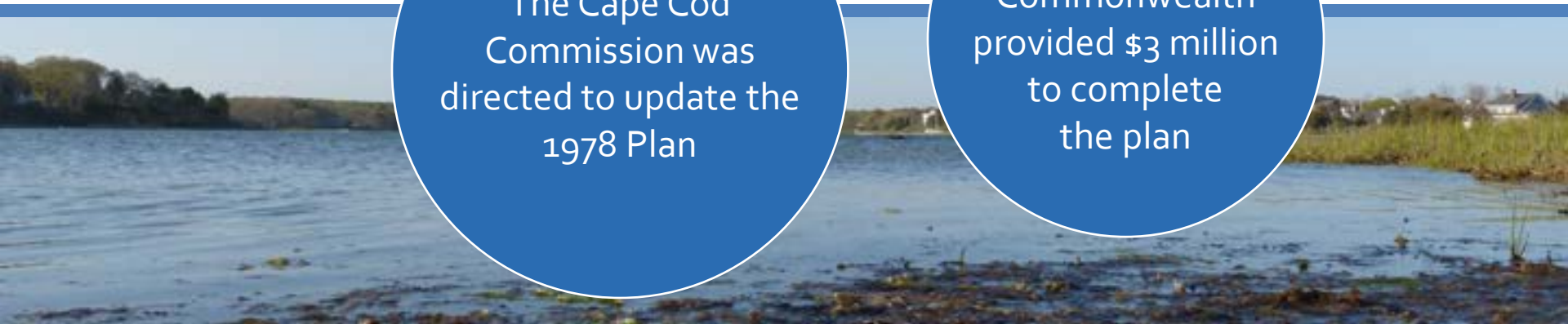
WHAT IS THE 208 PLAN?

Clean Water
Act Section
208



The Cape Cod
Commission was
directed to update the
1978 Plan

The
Commonwealth
provided \$3 million
to complete
the plan



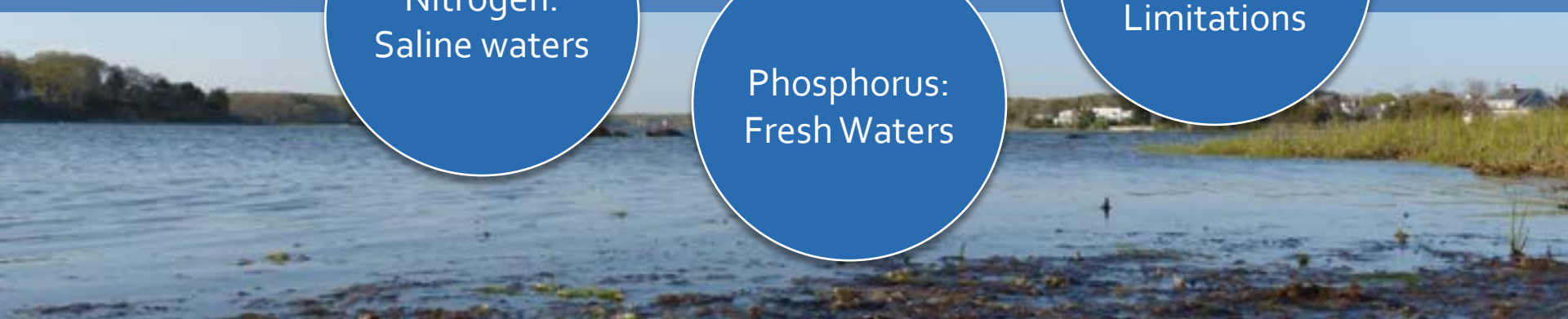
WHAT IS THE 208 PLAN?

Focus on 21st
Century
Problems

Nitrogen:
Saline waters

Phosphorus:
Fresh Waters

Growth and
Title Five
Limitations



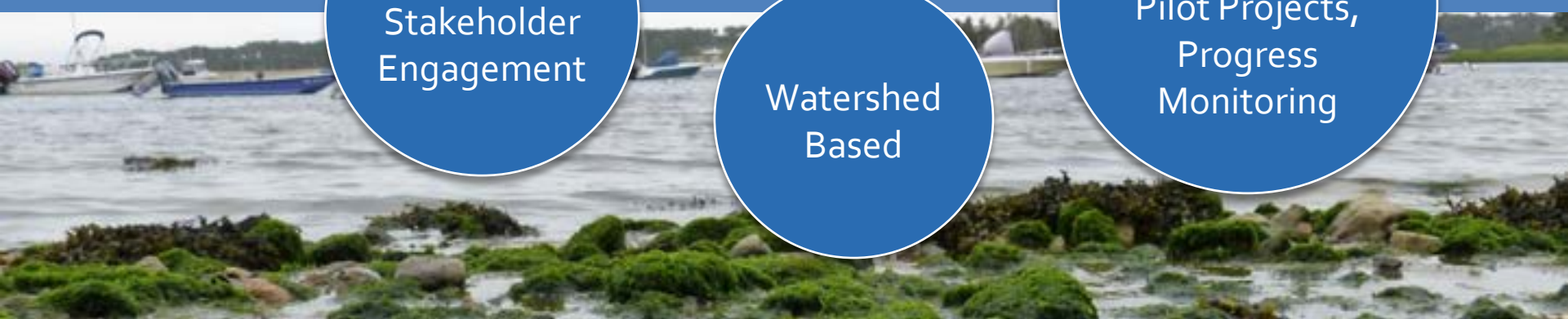
208 PLAN APPROACH

Diverse
Technology +
Multiple
Solutions

High
Stakeholder
Engagement

Watershed
Based

Adaptive
Management,
Pilot Projects,
Progress
Monitoring

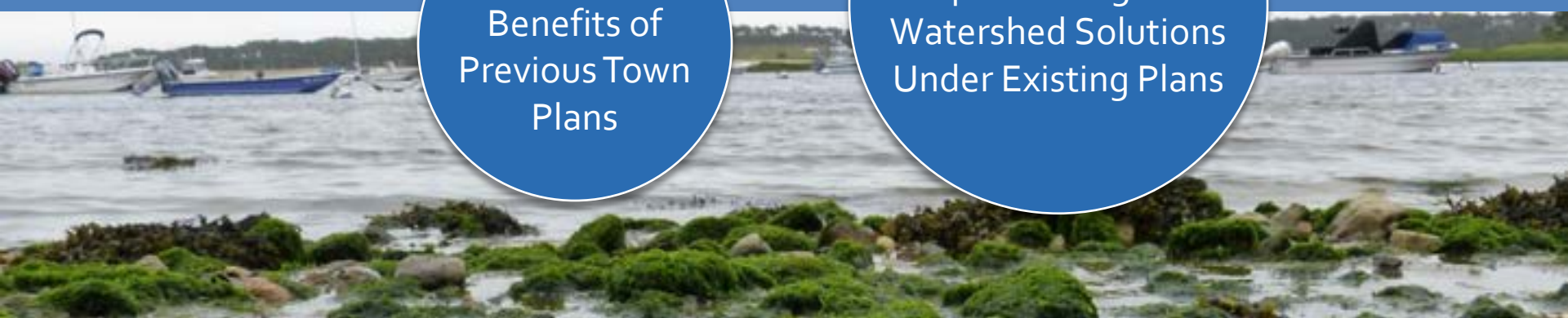
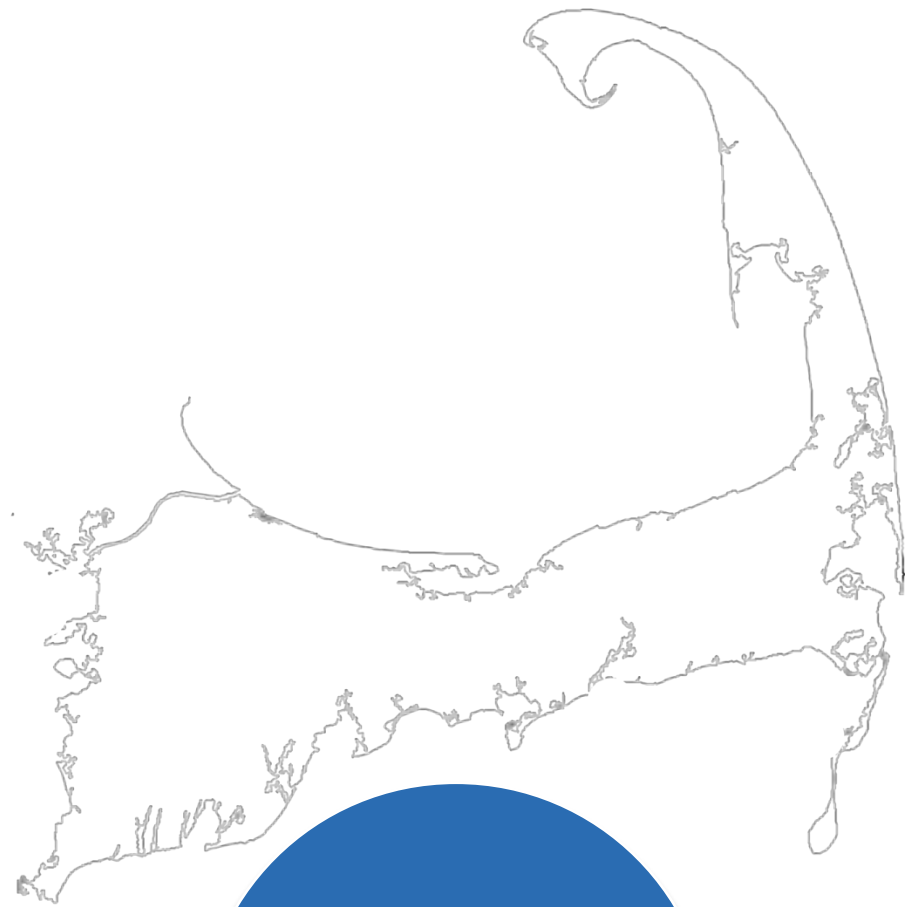


208 PLAN APPROACH

Coordinate
with MassDEP
& US EPA

Maximize
Benefits of
Previous Town
Plans

Support and
Expedite Targeted
Watershed Solutions
Under Existing Plans





208 PLAN DRAFT



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- Public Participation

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- Freshwater Ponds
- Groundwater/Drinking Water
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- Affordability Module
- Revenue Module
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- Regulatory Reform
- Support
- Cost

GLOSSARY

REFERENCES



THE CAPE COD MODEL: COMMUNITY ENGAGEMENT



2013 Stakeholder Engagement

Public Meetings

Watershed Working Groups

Goals,
Work Plan
& Roles

Affordability,
Financing

Baseline
Conditions

Technology
Options
Review

Watershed
Scenarios

Advisory
Board

Advisory
Board

Advisory
Board

Advisory
Board

Advisory
Board

RLI

Finance

RLI

Finance

RLI

Finance

RLI

Finance

RLI

TAC

TAC

TAC

Tech
Panel

Tech
Panel

Tech
Panel

Tech
Panel

July

August

September

October

December

RLI

Regulatory, Legal & Institutional Work Group

TAC

Technical Advisory Committee of Cape Cod Water Protection Collaborative

2014 Stakeholder Engagement

208 Summit

Subregional Working Groups

Drafting

Review &
Regional
Outlook

Scenario
Planning

Regulatory,
Legal, &
Institutional
Issues

Implementation
Issues

208 Plan

Advisory
Board

RLI

Finance

Govern

Advisory
Board

RLI

Finance

Monitor

Advisory
Board

Monitor

Advisory
Board

Monitor

January

February

March

April

May

June

July

August

Monitor

Monitoring Subcommittee

Govern

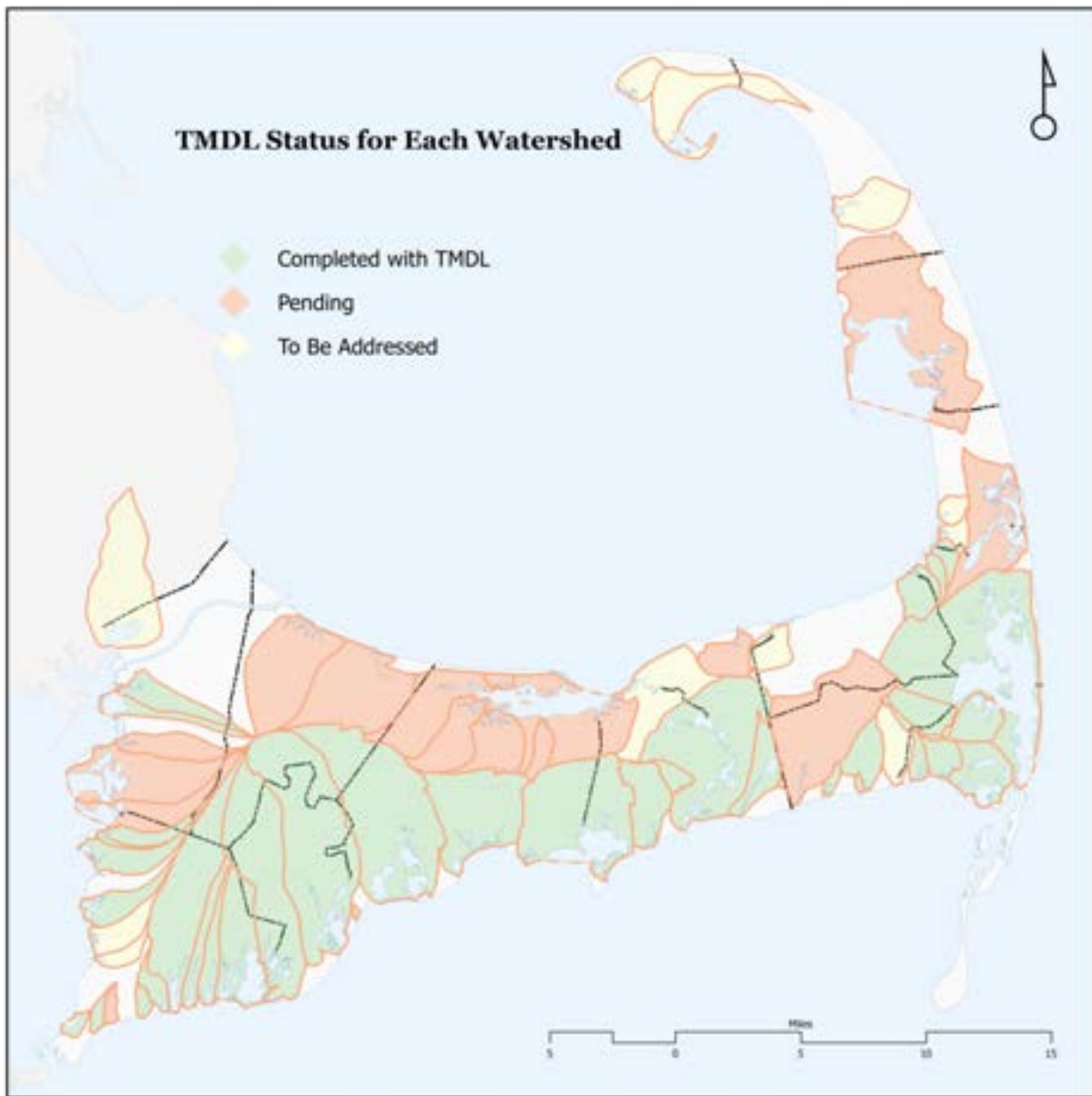
Governance Committee of Cape Cod Water Protection Collaborative



CAPE COD BASELINE: PEOPLE AND PLACE

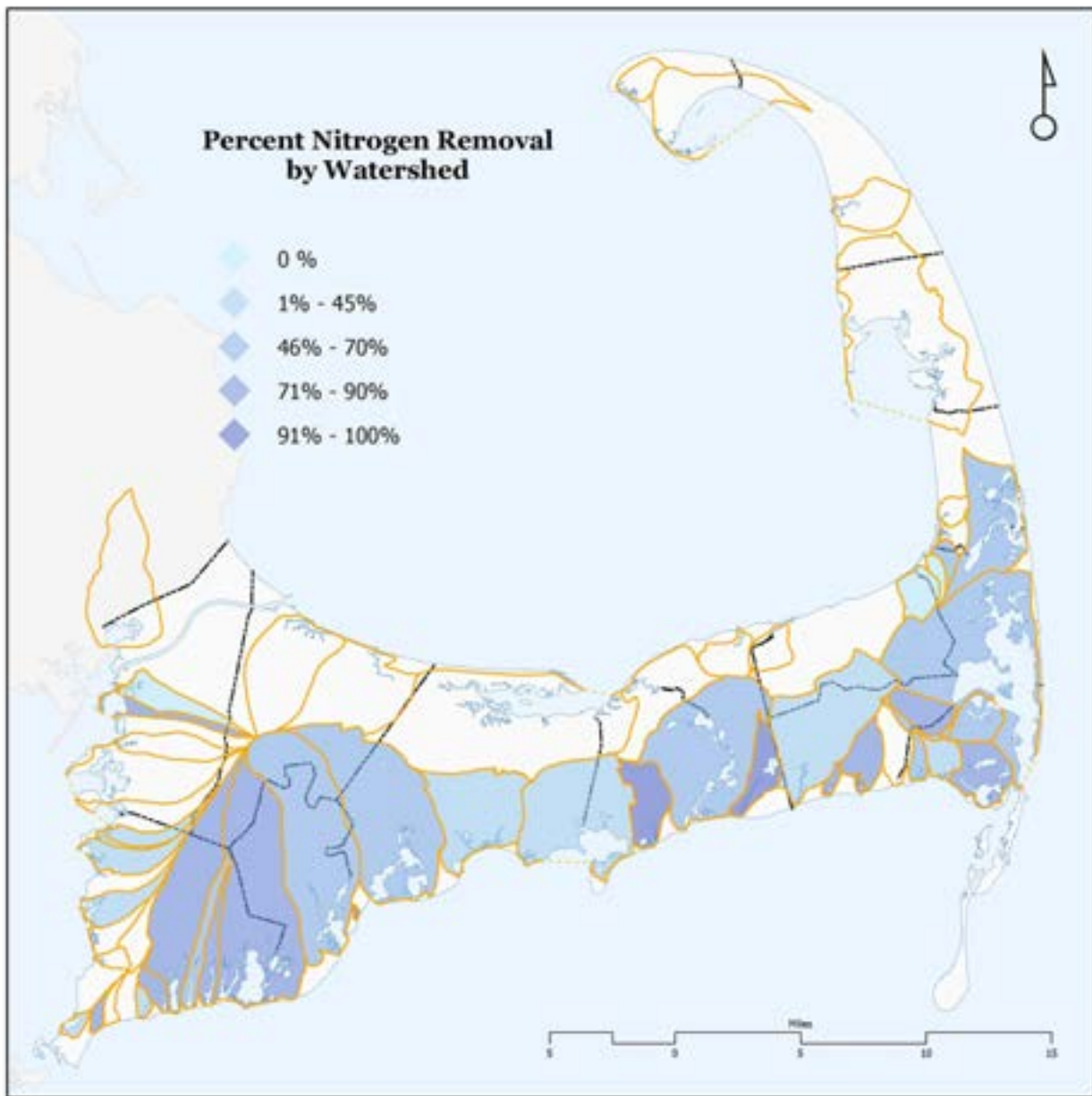
TMDL Status for Each Watershed

- Completed with TMDL
- Pending
- To Be Addressed



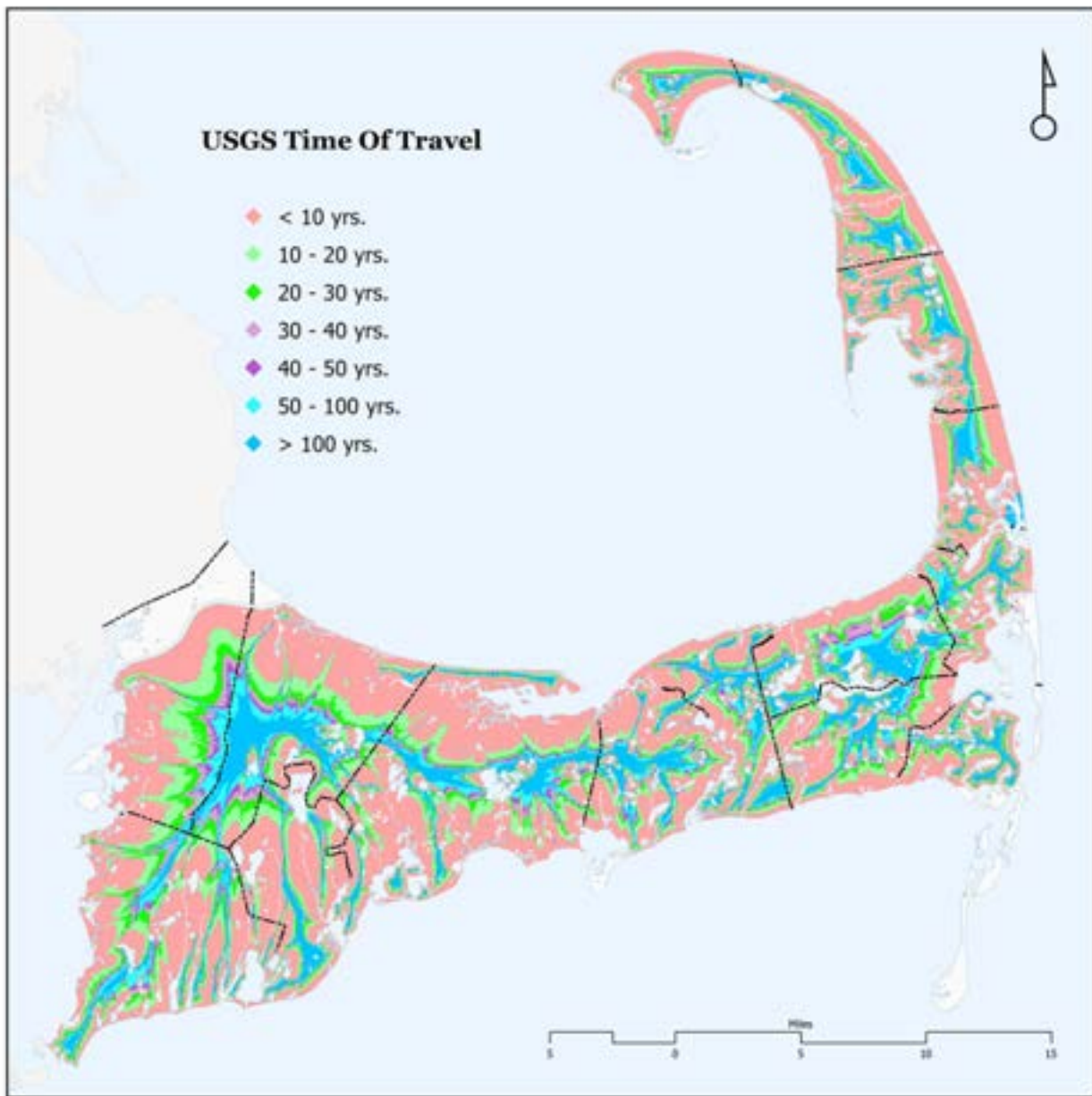
Percent Nitrogen Removal by Watershed

- 0 %
- 1% - 45%
- 46% - 70%
- 71% - 90%
- 91% - 100%



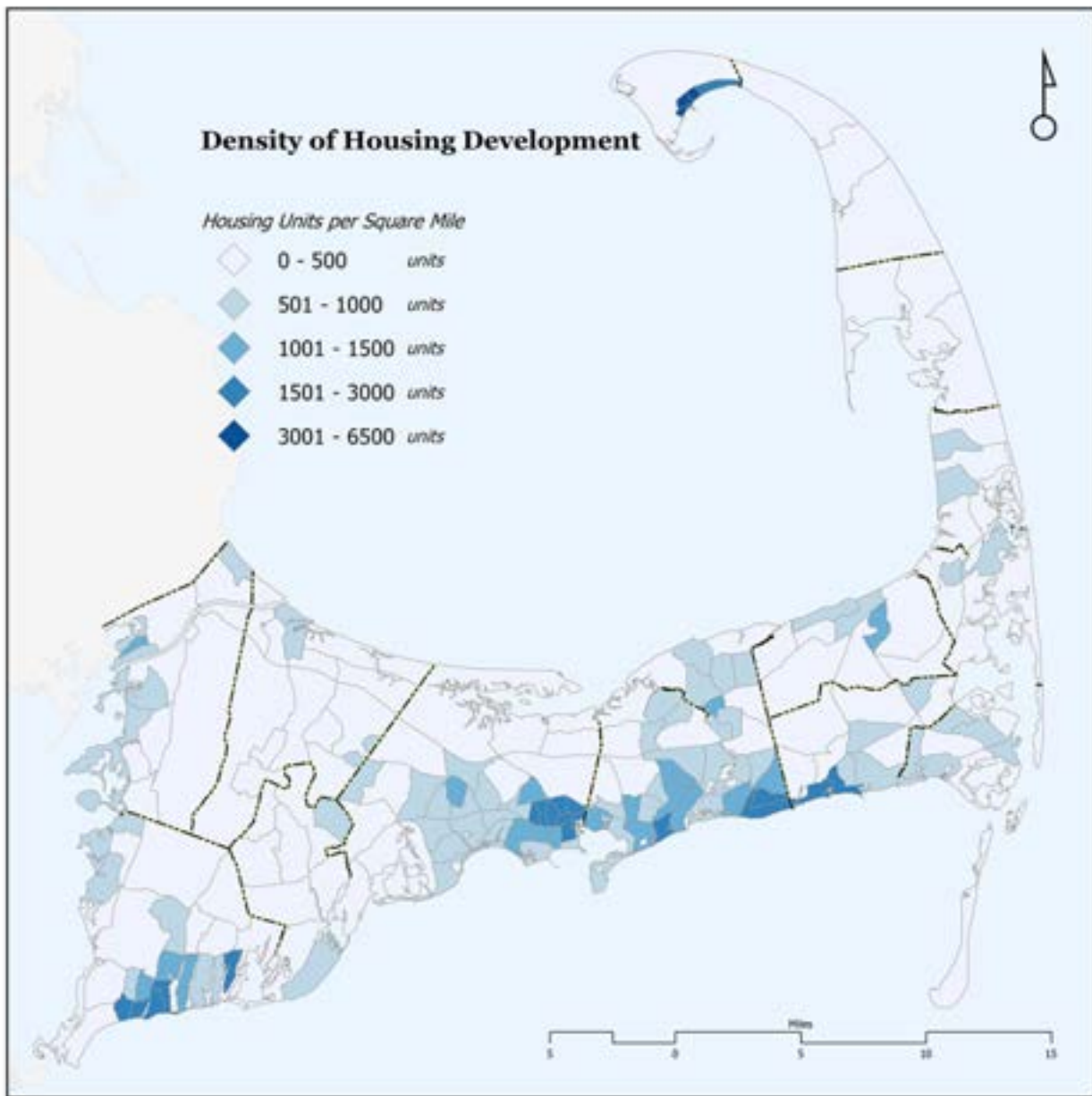
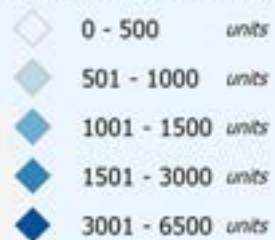
USGS Time Of Travel

- ◆ < 10 yrs.
- ◆ 10 - 20 yrs.
- ◆ 20 - 30 yrs.
- ◆ 30 - 40 yrs.
- ◆ 40 - 50 yrs.
- ◆ 50 - 100 yrs.
- ◆ > 100 yrs.



Density of Housing Development

Housing Units per Square Mile



An aerial photograph of a river delta where a brown river flows into a large body of green water. A small white boat is visible in the green water. The delta features intricate patterns of sandbars and channels. A blue vertical bar is on the right side of the image.

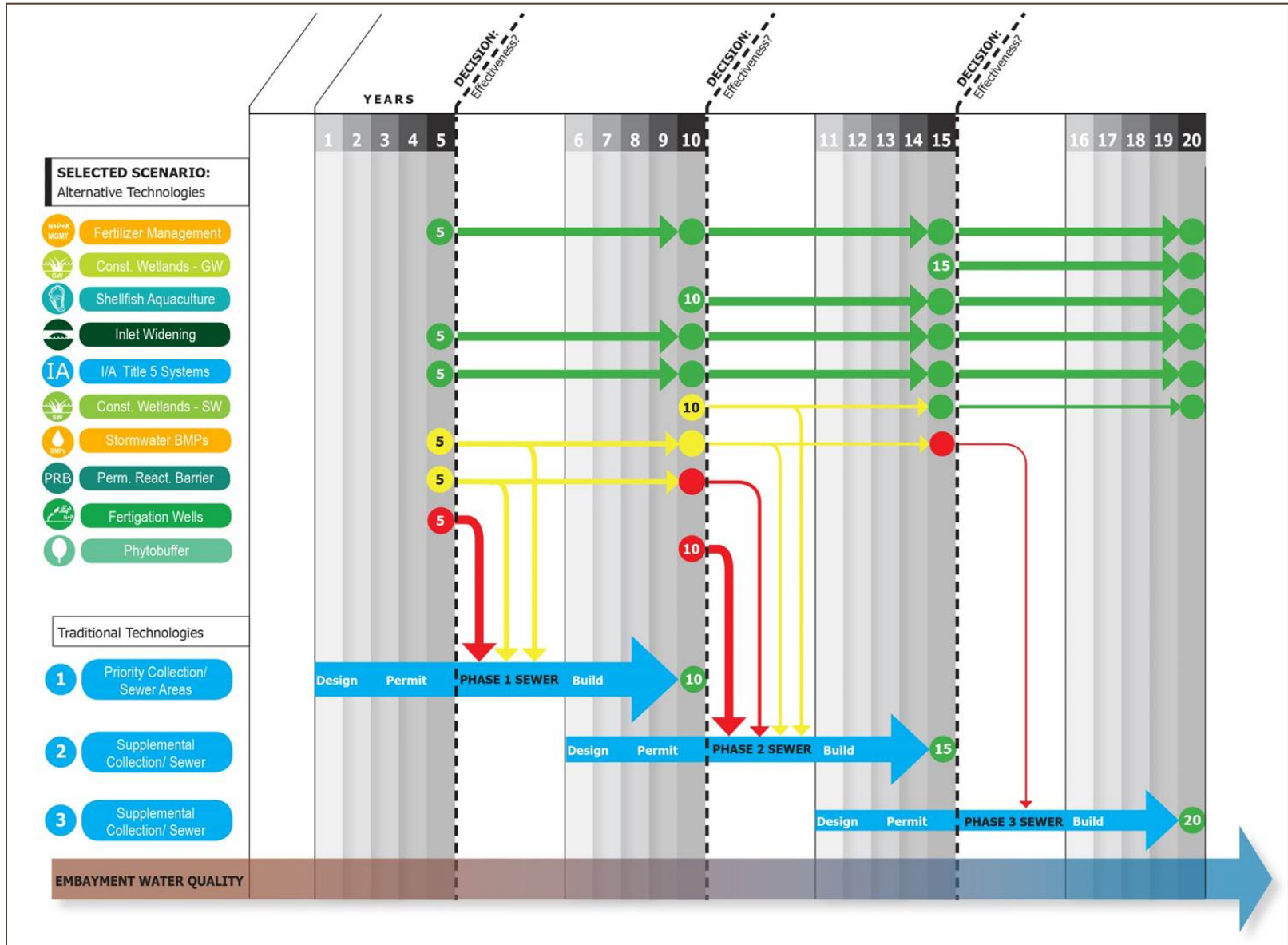
NUTRIENT MITIGATION TECHNOLOGIES & POLICIES

flickr/marcdiluzio

TECHNOLOGY MATRIX



ADAPTIVE MANAGEMENT



A wide-angle photograph of a coastal landscape. In the foreground, there is a sandy dune covered with dry, brown grass. A wooden fence made of vertical posts runs across the dune. In the middle ground, a sandy beach leads to the ocean. The waves are breaking, creating white foam. The sky is filled with soft, grey clouds. The overall scene is somewhat desolate and suggests a coastal environment that might be affected by erosion or sea level rise.

THE CAPE MODEL: TECHNICAL REVIEW

Problem Solving Approach

Wastewater
 Existing Water Bodies
 Regulatory

1

Identify Current N Removal Needs (Targets/Reduction Goals)

Present Load: X kg/day **−** **Target:** Y kg/day **=** **Reduction Required:** N kg/day

2

Non-Nitrogen Collection Needs

- A. Village Centers/Economic Centers
- B. Title 5 Problem Areas
- C. Growth Incentive Zones
- D. Pond Recharge Areas



3

Nonpoint Source Management

- A. Fertilizer Management
- B. Stormwater Mitigation



4

Watershed Alternative Technologies

- A. Permeable Reactive Barriers
- B. Inlet/Culvert Openings
- C. Constructed Wetlands
- D. Aquaculture



5

On-Site Alternative Technologies

- A. Eco-toilets (UD & Compost)
- B. I/A Technologies
- C. Enhanced I/A Technologies
- D. Shared Systems



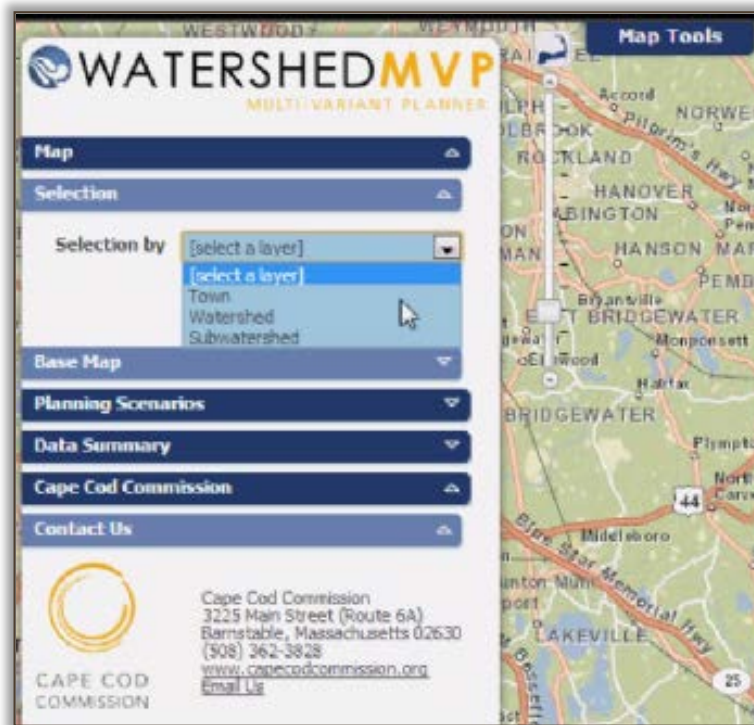
6

Supplemental Collection Areas

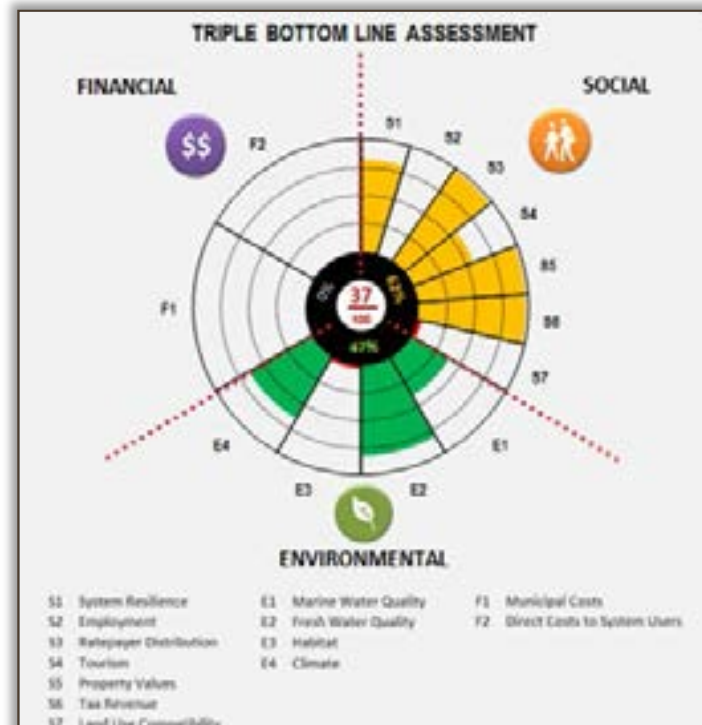


WATERSHED EVALUATION TOOLS

Watershed MVP

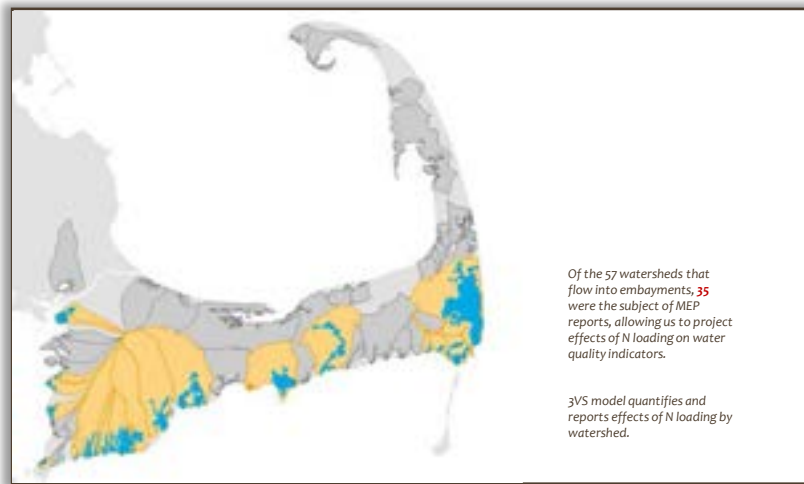


TBL Model



WATERSHED EVALUATION TOOLS

3VS



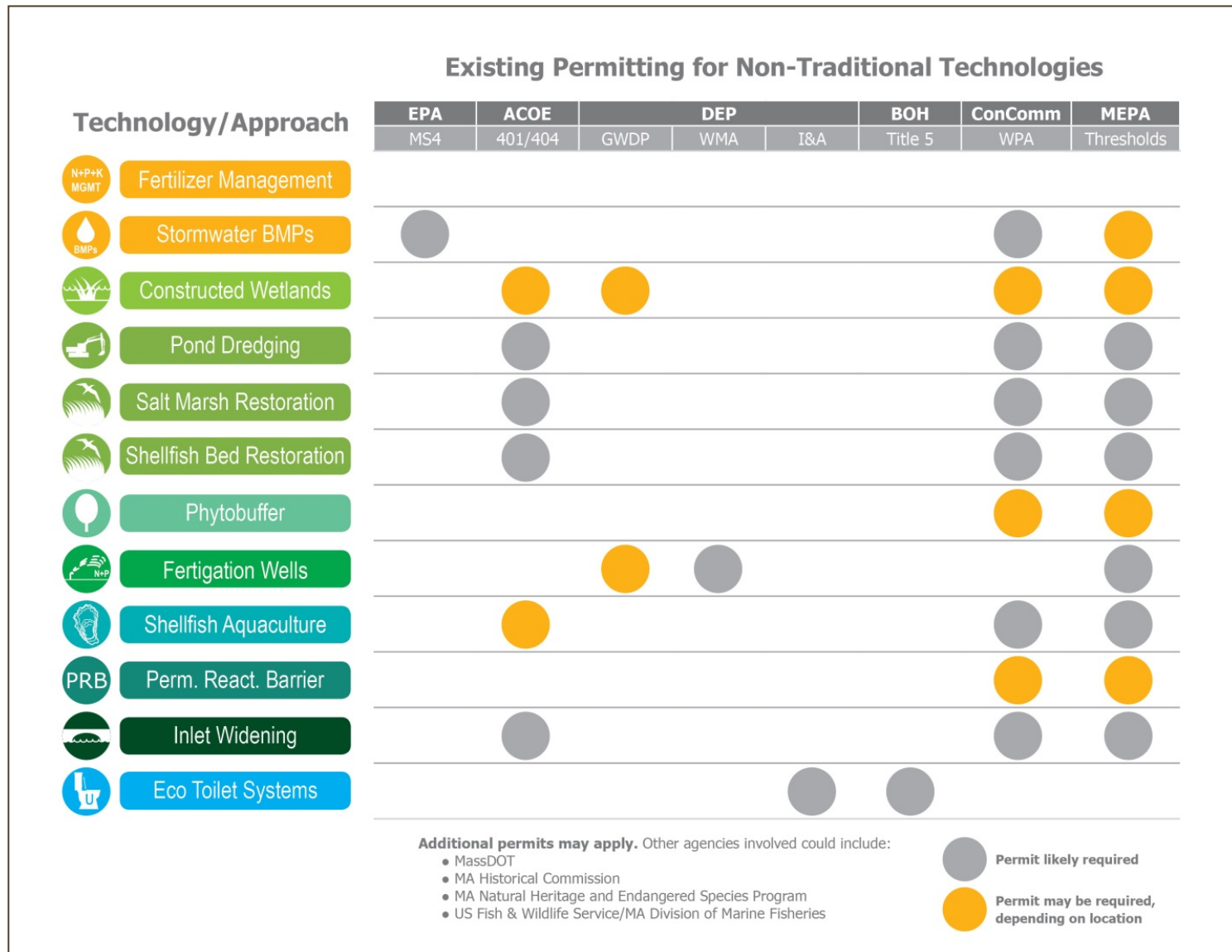
Financial Model





REGULATIONS

EXISTING REGULATORY FRAMEWORK





PLANNING & GROWTH MANAGEMENT

An aerial photograph of a coastal town, likely a waterfront community. The image shows a dense residential and commercial area with a grid-like street pattern. A prominent feature is a large, dark, rectangular structure, possibly a marina or industrial facility, extending into the water. The water is a deep blue-green color. The town is situated on a peninsula or a narrow strip of land, with a sandy beach visible along the waterfront. The overall scene depicts a developed coastal area with a mix of urban and waterfront features.

GROWTH MANAGEMENT

- Sewer-induced Growth, Smart Growth
- Long-term Planning
- Zoning
- Paying for New Growth

Planning Partnerships

JOINT BASE CAPE COD



PHOTO: JBCC

Planning Partnerships

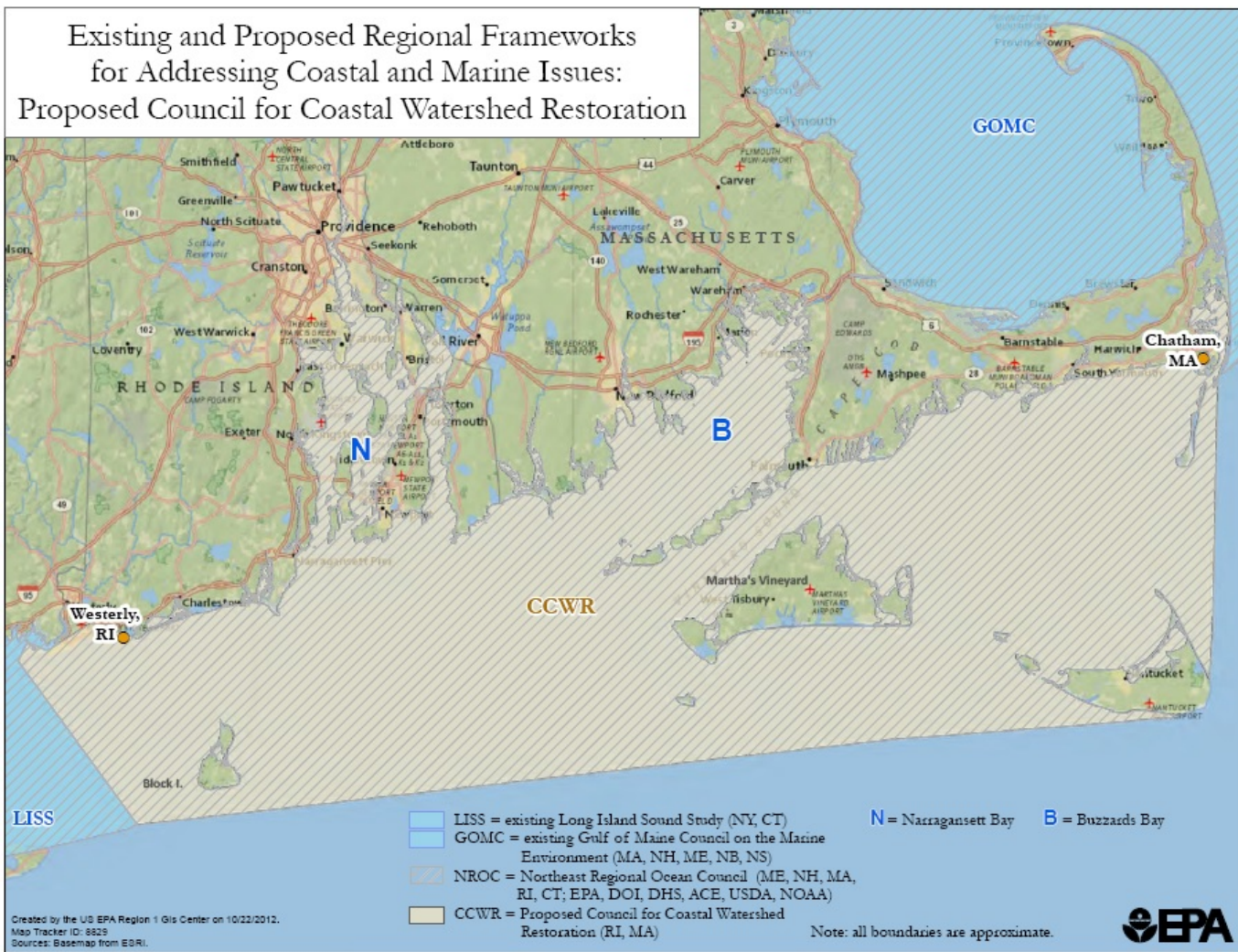
MASS. DEPARTMENT OF TRANSPORTATION



PHOTO: MASSDOT

Planning Partnerships

SOUTHEAST NEW ENGLAND COASTAL WATERSHED RESTORATION PROJECT



A scenic photograph of a wooden boardwalk bridge crossing a calm pond. The sky is filled with soft, golden clouds, and the sun is low on the horizon, creating a warm, golden glow. The bridge's wooden planks and railings lead the eye towards the center of the frame. The water reflects the sky and the surrounding trees. On the right side of the image, there is a vertical blue bar.

COST & FINANCIAL AFFORDABILITY

A FINANCIAL MODEL developed by the Cape Cod Commission helps estimate the total cost to build, finance, and operate a proposed set of wastewater solutions and determine if, on average, it is affordable to households.





RECOMMENDATIONS & IMPLEMENTATION

INFORMATION

- Regional Monitoring Program
- Water Quality Data Center
- Publicly available information



REGULATORY REFORM

- Special Review Procedure
- Capital Developments of Regional Impact
- Targeted Nutrient Management Plans
- 208 Plan Consistency Review



REGULATORY REFORM

- Watershed Permitting
- Nitrogen Sensitive Areas
- Waste Management Agencies
- Water Pollution Abatement Districts
- NPDES delegation



SUPPORT

- Watershed Teams
- Hybrid Watershed Planning Approach
- Adaptive Management
- Pilot Projects
- Planning Partners



COST



- Cape Cod Capital Trust Fund
- Water Infrastructure Bill: MassDEP 25% principal forgiveness
- Environmental Bond Bill



WHERE WE ARE TODAY

208 Plan Update Status



Completed 70 meetings
soliciting stakeholder input



Submitted draft 208 plan
to DEP and EPA



Released public draft 8/20/2014

208 Plan Update Status



90 day public comment period open



Four Subregional
Public Hearings Sept./Oct.



Continue to fine tune
decision support tools



Final plan to be released in January

