

# Conservation Commission & Plan Review

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MUNICIPAL BOARD EMPOWERMENT SERIES WORKSHOP

OCTOBER 29, 2019

MAINE AUDUBON, FALMOUTH



# Agenda

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1. Plan review 101
2. Role of conservation commissions in the review process
3. Reading plans
  - a. Site Plans
  - b. Subdivisions
4. Key conservation considerations
5. Hands-on exercise
6. Interacting with the Planning Board
7. Discussion / Q&A

# Plan Review 101

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- Site Plan & Subdivision Review

- Ensure development occurs in a manner consistent with community goals, policies, and strategies
- Protect health, safety, and welfare of citizens
- Promote development of a sound and stable community
- Protect the environment

# Role of Conservation Commission in Plan Review Process

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- Role varies from community to community
  - Formal vs. Informal
- Identify points in the process for input
  - Review local ordinances for mention of conservation commission and/or opportunities for input from municipal commissions
- Build relationship with Planning Department
  - Request applications be forwarded to Conservation Commission for review and comment
- Not all recommendations will be accepted by the Planning Board

# Role of Conservation Commission in Plan Review Process: Local Land Use Ordinances

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## •Cape Elizabeth

- Conservation Committee **advises** the Planning Board in the granting of Resource Protection Permits
  - Prior to considering the application, the Planning Board shall refer it to the Conservation Commission for its review and recommendation.
  - Conservation Commission may request that the applicant attend a meeting of the Commission to discuss the application.
- Role as steward of Town open space is formalized in the Conservation Ordinance
  - Following report of a potential encroachment, the potential encroachment shall be inspected by the Town and, if deemed necessary, a professional surveyor may be retained to confirm the property boundary and prepare a sketch showing the extent of the encroachment. When applicable, the deed for the open space shall be reviewed for restrictions. If the Conservation Commission identifies a possible encroachment, it may gather information as described above and report its findings to the Town Manager.

# Role of Conservation Commission in Plan Review Process: Local Land Use Ordinances

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- **Eliot**

- Consultation **required** to approve language of dedication and allowed uses if undeveloped land is dedicated to the town for open space developments

- **Kennebunkport**

- **Shall** be provided with copies of appeals of CEO's interpretation to allow opportunity to provide information, comments, and recommendations to BOA

- **Kittery**

- Appointment, purpose, duties, powers, & membership established in ordinances
- **Must** be invited to review and offer recommendations from an environmental protection perspective during preliminary plan review
- **Must** be notified of public hearing for plan acceptance and right-of-way application
- **May** request information from CC for proposed wetlands alterations and the PB will consider the advisory opinion

- **York**

- Feedback **shall** be solicited from CC on the site design during Conceptual Design Review for cluster subdivisions
- **May** be involved in mandatory inspection program of open space for cluster subdivisions
- Notification **required** if variance requested from BOA for shoreland zone





# LEGEND:

- EXISTING PROPERTY LINE
- EXISTING OVERHEAD POWERLINE
- EXISTING GAS LINE
- EXISTING FENCE LINE
- EXISTING PAVED ROAD
- EXISTING GRAVEL ROAD
- EXISTING WETLAND
- EXISTING STREAM
- EXISTING WETLAND SETBACK
- EXISTING INDEX CONTOUR LINE
- EXISTING INTERVAL CONTOUR LINE
- PROPOSED INDEX CONTOUR LINE
- PROPOSED INTERVAL CONTOUR LINE
- PROPOSED SOLAR ARRAY
- PROPOSED ELECTRICAL EQUIPMENT
- PROPOSED ACCESS ROAD
- MODULE SETBACK LINE
- PROPOSED SECURITY FENCE
- PROPOSED LAYDOWN YARD
- PROPOSED DRAINAGE BERM
- PROPOSED DRAINAGE BASIN
- DRAINAGE BOUNDARY LINE
- DRAINAGE DIRECTION

BASIN	BOTTOM ELEV.	OUTLET ELEV.	BASIN "DEAD" STORAGE (CF)	OUTLET OUTLET ELEV.	TOP OF BERM ELEVATION	BERM "TIE" STORAGE (CF)
1	128.9	132.1	17,600	133	138.6	25,700
2	135.2	136.2	8,720	138.5	138.2	8,700
3	143.12	144.22	17,600	142	145.10	22,500
4	146.4	149.4	8,900	148	154.6	7,300

## Westwood

Phone: (603) 882-5100 FAX: (603) 882-5101  
 Email: info@westwoodps.com  
 Website: www.westwoodps.com



Designed: JA  
 Checked: MFC  
 Drawn: JA  
 Record Drawing by/Date:  
 Revisions:  
 1. DATE DESCRIPTION

Prepared for:  
**NEXTERA ENERGY RESOURCES**

## Kennebunk Solar Project

York County, ME

### Drainage Plan

LAND OWNER:  
 STARR & GILES  
 PROJECT ADDRESS:  
 511 ALPINE RD. & 524 ALPINE RD.  
 KENNEBUNK, ME

### Civil Permit Plan Not For Construction

Date: 12/20/2017  
 Drawing No: C-303







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1. All work shall conform to the applicable codes and regulations.

- INSPECTIONS/NOTIFICATION

1. MEASURING MEASURES SHALL BE AFFECTED AS INDICATED DURING THE EMERGENCY CONSTRUCTION CALL, AFTER EACH PERFORMING A WORKING OF PERIOD OF 15 MINUTES AND PROVIDING AN AT LEAST EIGHT HOURS WORKING. THE CONTRACTOR SHALL FURNISH A FULL DESCRIPTION OF ALL INSTALLED EMERGENCY CONSTRUCTION MEASURES. THE CONSTRUCTION CALL PERFORMANCE BEING AS NOTED IN ALL COMPLETED PERFORMING OF THE EMERGENCY CALLING, MEASURES TO CONSTRUCTION SHALL PROVIDE THE NECESSARY SUPPORT AND STAYED AS LONG AS POSSIBLE. THE CONTRACTOR SHALL PROVIDE THE NECESSARY FOLLOW-UP AND MAINTAIN EMERGENCY CONSTRUCTION MEASURES MEETING THE REQUIREMENTS OF THE PLAN.
2. FOLLOWING THE TREATMENT AND/OR PLAN, APPROVED, THE SUBMITTAL SHALL BE MADE AND A DEMONSTRATION SHALL BE PROVIDED. THE DEMONSTRATION SHALL BE ESTABLISHED. ESTABLISHED WITH A MINIMUM OF AREAS RELATED WITH VARIOUS TYPES OF EMERGENCY CALLS. THE CONTRACTOR SHALL PROVIDE THE NECESSARY FOLLOW-UP AND MAINTAIN EMERGENCY CONSTRUCTION MEASURES MEETING THE REQUIREMENTS OF THE PLAN.

## DISCUSSION

- [illegible]



**CONCLUSION**  
[PROMOTING] [MATERIAL] [MANUFACTURED] [ON] [OFF] [THE] [PROJECT] [SITE]  
[CONSTRUCTION] [IS] [IN] [ACCORDANCE] [WITH] [THE] [MATERIAL] [MANUFACTURE] [AND] [MANAGEMENT]  
[MANUAL], [LAST] [REVISED] [3/2000] [OR] [LATER]. [IT] [MUST] [CONVEY] [PRINCIPALLY] [OF] [USE]  
[SEPARATED] [AT] [THE] [PORT] [OF] [GENERATION], [AND] [MAY] [INCLUDE], [SHIPPED] [MATERIAL]  
[CONSTRUCTION] [MATERIAL], [OR] [ACCESSIBLE] [MATERIAL] [PRODUCTS], [NEAR]  
[LIFE], [GROUND] [CONSTRUCTION] [CLOSE] [OR] [PERMANENT] [MATERIAL] [PRODUCTS] [WILL]  
[APPEAR] [AT] [THE] [ISSUING] [COMMISSION] [OF] [THE] [MATERIAL].

- [illegible]

EROSION CONTROL MIX BERM

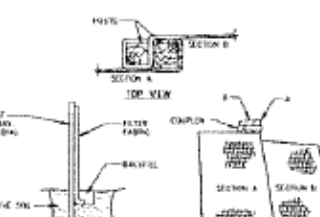
NDT TO SCALE



- NOTES:**
1. BURY THE TOP END OF THE REINFORCING IN A 6" FRESH CONCRETE AND TAMP REINFORCING SQUARES AND WITH TIEBARS 4" SPACING @ 20" FROM TOP (4" SPACING @ 20" FROM BOTTOM)
  2. FOUR CORNER JOINTS TO HAVE UPPER END OF LOWER STEEL BAR WITH UPPER END OF UPPER BAR 4" AND STAPLED TOGETHER 6" OVER 4"
  3. LATERAL JOINTS TO HAVE 4" OVERLAP OF EACH SIMPLE END CENTER
  4. SIMPLE OUTSIDE LATERAL JOINT 4" ON CENTER
  5. BARS STARTS TO BE MAX 18" IF 11" MAX @ 10" AND 11-1/2" MAX
  6. USE NORTH AMERICAN GREEN S-100 OR APPROVED EQUAL

EROSION CONTROL BLANKE

NOT TO SCALE

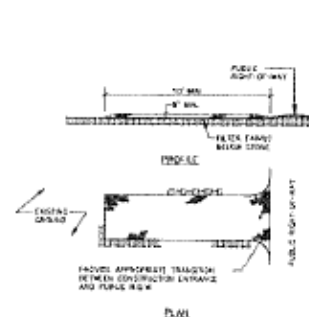


INSTALLATION NOTES:

2. EXCAVATE A 1" TRENCH ALONG THE LINE OF PLACEMENT FOR TIE BARRIER.
3. UNROLL A SECTION AT A TIME AND POSITION THE PIVOTS AGAINST THE BACK SIDE/OUTSIDE WALL OF THE TRENCH.
4. DRIVE PIVOTS INTO THE GROUND UNTIL APPROXIMATELY 2' OF PIVOT IS EXPOSED ON THE TRENCH BOTTOM.
5. LAY THE TIE-IN CLAMP OF FIBER OPTIC ON THE UNDISBURBED PORTION OF THE TRENCH PARALLEL TO THE TRENCH AND NEAR THE SKEL. THE SKEL SHOULD BE PLACED ON THE EXPOSED PORTION OF THE FIBER OPTIC AND THE UNDISBURBED PORTION OF THE FIBER OPTIC SHOULD BE PLACED ON THE UNDISBURBED PORTION OF THE TRENCH. THE TIE-IN CLAMP SHOULD BE PLACED ON THE EXPOSED PORTION OF THE FIBER OPTIC AND THE UNDISBURBED PORTION OF THE FIBER OPTIC SHOULD BE PLACED ON THE UNDISBURBED PORTION OF THE TRENCH. THE TIE-IN CLAMP SHOULD BE PLACED ON THE EXPOSED PORTION OF THE FIBER OPTIC AND THE UNDISBURBED PORTION OF THE FIBER OPTIC SHOULD BE PLACED ON THE UNDISBURBED PORTION OF THE TRENCH.
6. JOIN SECTIONS AS SHOWN ABOVE.
7. BARRIER SHALL BE WHAT SET TYPE OR EQUAL.

FILTER BARRIER

NOT TO SCALE

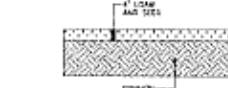


**NOTE**

1. STORM CULVERT: 48" DIAMETER W/ 12" WALL THICKNESS, 12' LONG, 12' DIA. CULVERT
2. LOCATED: ON TACOMA RD. FLUWY, W/IN 50' FEET
3. DEPTH: NOT LESS THAN 18" DEPT. IN PLACE
4. WORK: NOT LESS THAN FULL WIDTH AT ALL POINTS OF ACCESS ON FLUWY
5. MAINTENANCE: THE TRENCH SHALL BE MAINTAINED IN A CONDITION SUCH AS TO PREVENT TRIPPING OR FALLING OF MATERIALS DUE TO PROTRUDING OR POORLY PLACED MATERIALS OR TO CRACKING WITH AVOIDANCE. SUCH AS CONDUITS BOWING AND BULGING AND/OR FLATTENING OF ANY MATERIALS DUE TO TREAD WEIGHT. ALL SCUMS MUST BE REMOVED IMMEDIATELY. TRENCHES SHALL BE FULLY REINFORCED WITH FULLY REINFORCED CONCRETE.

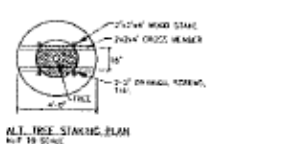
## STABILIZED CONSTRUCTION EXITS

NOT TO SCALE

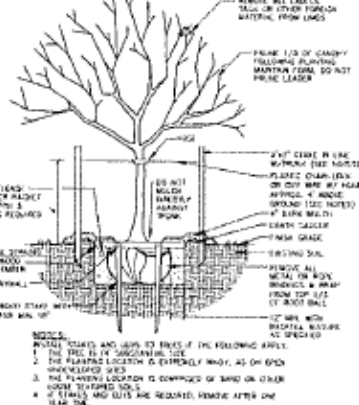


LOAM & SEED SECTION

NOT TO SCALE

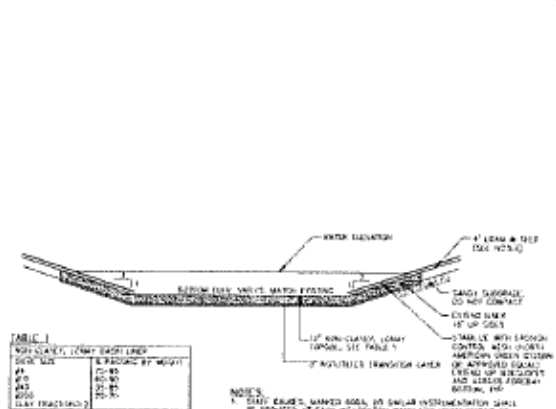


1.34



### TREE PLANTING DETAIL

NOT TO SCALE



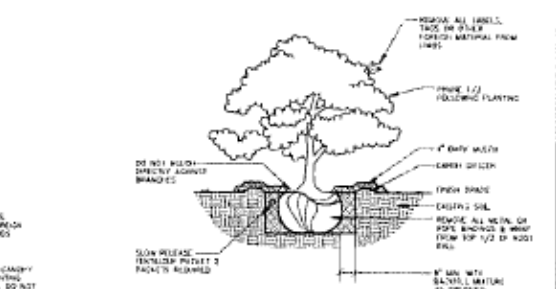
DRUG SIZE	CLAY ENRICHMENT
#1	70-85
#2	80-90
#3	91-95
#4	96-99
CLAY FRAC(TION)	

**INSTRUMENTAL BASIN CONSTRUCTION INSTRUCTIONS**  
The Engineer will retain the services of a Professional Engineer to provide the construction and stabilization of all stormwater management structures. It is necessary that the Professional Engineer will interpret the construction plan for the construction. Once all stormwater management structures are constructed and stabilized, the Professional Engineer will notify the Department in writing within 30 days to state that the pond has been completed. The Professional Engineer will also provide a copy of the Engineer's inspection during the time of construction, the time of basin completion, and the items found to be in place and include any required testing data in these inspection data.

1. **CONSTRUCTION REQUIREMENTS:** THE SOIL FILTER MEDIA AND VEGETATION MUST NOT BE INSTALLED UNTIL THE UNDERLYING GROUNDWATER IS PROTECTED BY AN IMPERVIOUS BARRIER. THE FILTER MEDIA SHALL BE PLACED IN A MANNER THAT PREVENTS THE MEDIA FROM BEING DISPERSED BY THE UNDERLYING GROUNDWATER. THE FILTER MEDIA SHALL BE PLACED IN A MANNER THAT PREVENTS THE MEDIA FROM BEING DISPERSED BY THE UNDERLYING GROUNDWATER. THE FILTER MEDIA SHALL BE PLACED IN A MANNER THAT PREVENTS THE MEDIA FROM BEING DISPERSED BY THE UNDERLYING GROUNDWATER.
2. **CONSTRUCTION OF LINES:** CONSTRUCTION OF THE LINES SHALL BE AVOIDED.
3. **CONSTRUCTION REQUIREMENTS:** CONSTRUCTION OF A PROFESSIONAL ENGINEER WILL CONDUCT A SURVEY OF THE SITE TO DETERMINE THE PROPOSED LINES. THE PROPOSED LINES SHALL BE PLACED IN A MANNER THAT PREVENTS THE MEDIA FROM BEING DISPERSED BY THE UNDERLYING GROUNDWATER.
4. **CONSTRUCTION REQUIREMENTS:** CONSTRUCTION OF A PROFESSIONAL ENGINEER WILL CONDUCT A SURVEY OF THE SITE TO DETERMINE THE PROPOSED LINES. THE PROPOSED LINES SHALL BE PLACED IN A MANNER THAT PREVENTS THE MEDIA FROM BEING DISPERSED BY THE UNDERLYING GROUNDWATER.

## INFILTRATION BASIN SECTION (REPAIR WORK)

NOT TO SCALE



## DECIDUOUS &amp; EVERGREEN SHRUBS

## LANDSCAPE NOTES

- [illegible]

[illegible]

DETAILS  
 20' PORTER FARMS  
 100 TOWN STREET  
 NORTH BERKLEY, MAINE  
 PORTER LAND PRESERVATION, LLC  
 154 ASPEN AVENUE  
 BARTLETT, MAINE 04204  
 PROJECT NO. 02063 SCALE NIS  
 SHEET 8 OF 9

# Key Conservation Considerations

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Image: NRCS - USDA



# MS4 Requirements

- MS4: Municipal Separate Storm Sewer Systems
- Since 2003, Clean Water Act requirements apply to 14 municipalities in Greater Portland
- Six Minimum Control Measures
  1. Public Education and Outreach
  2. Public Participation
  3. Illicit Discharge Detection and Elimination
  4. **Management of Construction Site Runoff**
  5. **Management of Post Construction Site Runoff**
  6. Good Housekeeping for Municipal Operations





# Implications for Development Review

- New Permit to be issued with additional requirements:  
Expected effective date **July 1, 2021**
  - **Additional municipalities *could* be added in the 2026 Permit**

## Key Points for Development Reviewers

- If you don't have an ordinance that "requires the use of erosion and sediment control BMPs" you need one
- Public comment requirements will be enhanced

*Additional requirements may be added, as MCGP and MS4 permit are under review and will soon be re-issued*

# Key Conservation Considerations

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- Vegetative Buffers

- Shoreland Zone

- Wetlands

- Stormwater

- LID/Green infrastructure
  - Impervious (%lot coverage)

- Habitats

- Erosion control

- Landscaping

- Vegetation
  - Pesticides/herbicides
  - Tree removal

- Open space

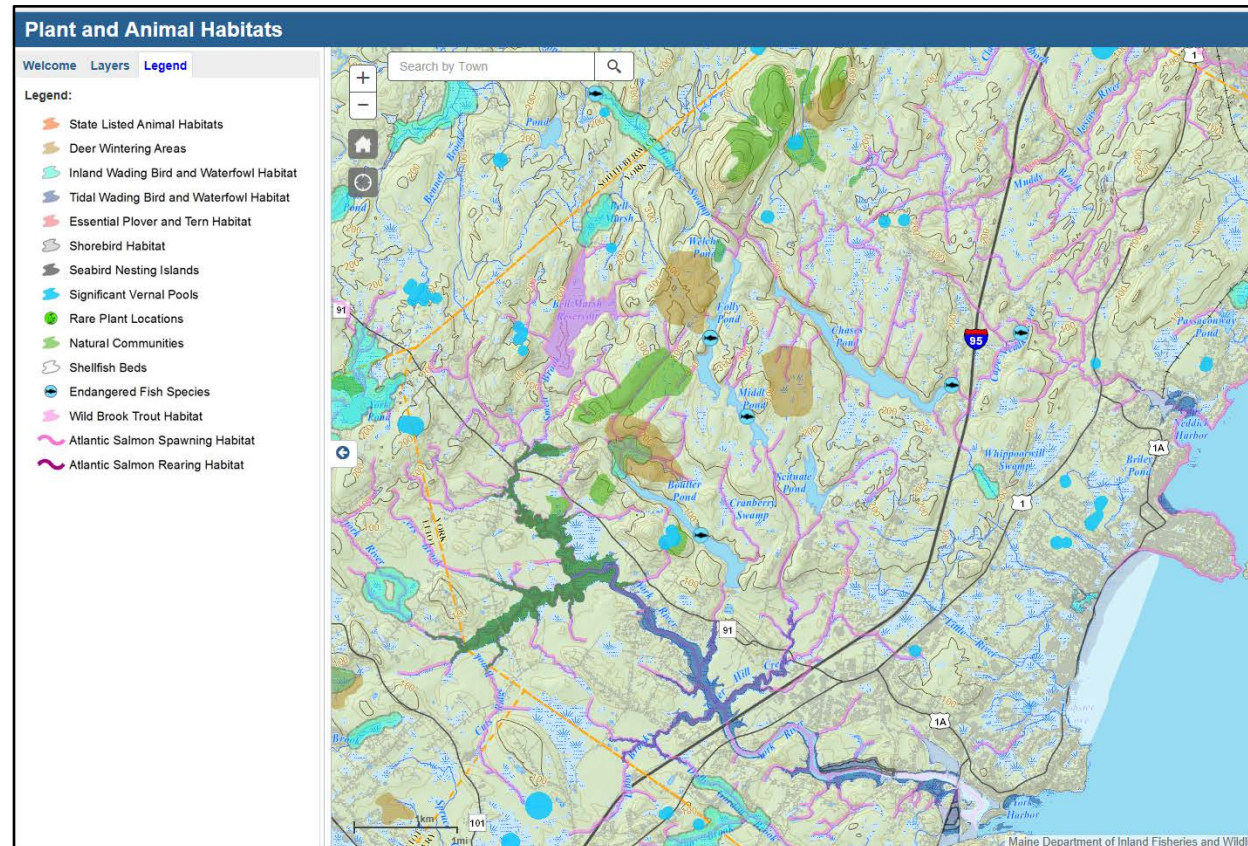
- Connectivity, value

- Hazard areas

- SLR, surge, marsh migration, slopes

# Resources

- Beginning with Habitat <http://www.beginningwithhabitat.org/>



# Resources

- Conserved lands

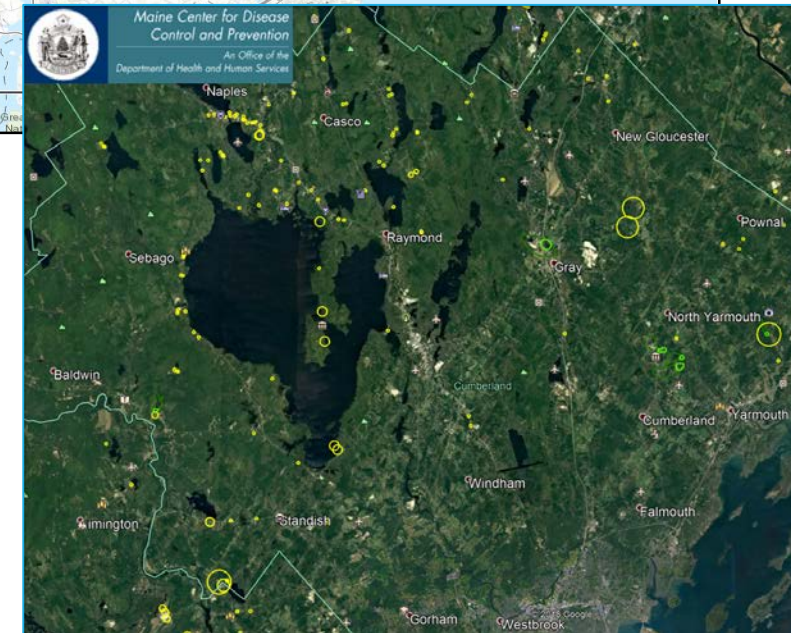
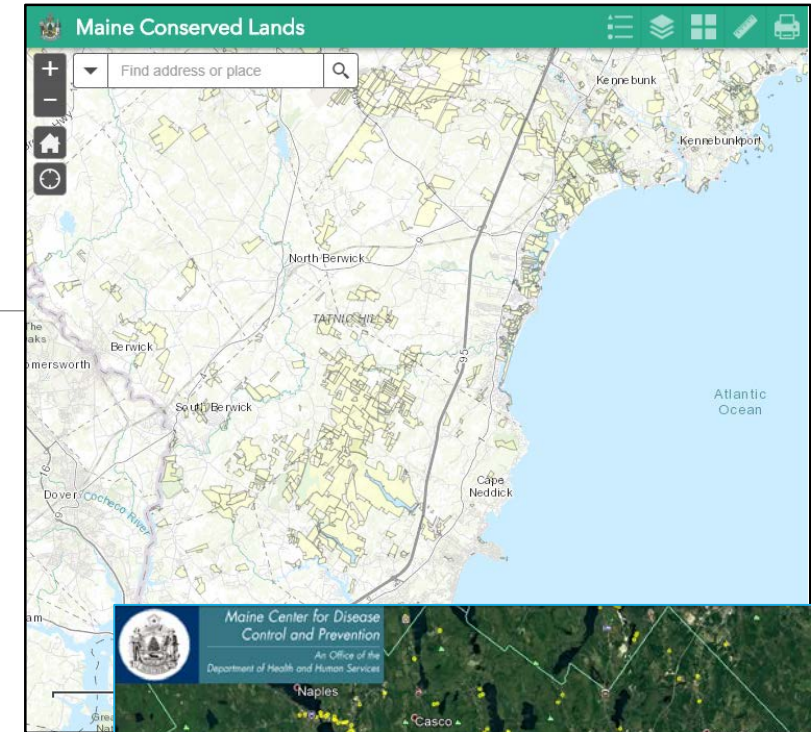
- Land trusts
- Department of Agriculture, Conservation & Forestry, Bureau of Parks & Lands - Conservation Lands Map  
[https://www.maine.gov/dacf/parks/publications\\_maps/conservation\\_lands\\_maine.html](https://www.maine.gov/dacf/parks/publications_maps/conservation_lands_maine.html)

- Natural hazards, resiliency, & marsh migration

- MGS Coastal Viewer <https://www.maine.gov/dacf/mgs/hazards/coastal/index.shtml>
- TNC Coastal Resilience Tool <http://maps.coastalresilience.org/maine/>

- Other

- Soil & Water Conservation District <http://cumberlandswcd.org/site/>
- Maine Drinking Water Program Public Water Resources Information System  
<https://www.maine.gov/dhhs/mecdc/environmental-health/dwp/pws/maps.shtml>
- Locally-specific resources





# HANDS-ON EXERCISE

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READING PLANS

# Interacting with the Planning Board

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- Ways to provide input
  - Public Hearing
  - Written comments
  - Meet with Planner
- Balancing different priorities



# Questions & Discussion

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