



MEETING AGENDA

Groton Utilities Watershed - Drinking Water Quality Management Oversight Committee

Thursday, June 21, 2007
9:30 am – 12:30 pm

9:30 **Welcome and introductions / Misc. Items**

9:45 **Guest Speaker & Discussion**

- **Speaker:** Dave Bjerklie, United States Geologic Survey (USGS)
Topic: Tools Available from USGS for Water Resource Assessment

10:45 **Finalization of Planning Process (Chi Ho's Figure 1)**

1. Discussion on frequency of Plan updates.
 - Will interim updates be feasible as projects are accomplished, new BMPs become available etc? If so, adopt a procedure.
2. Discussion on how Plan updates and action items will be approved.
 - One option is to require a quorum of the Oversight Committee to approve an update and/or an action item.
3. Discussion on how Action Items will be finalized.
 - Once an action item is presented to the Oversight Committee as being complete the OC must decide that it is indeed complete. A procedure should be adopted.
4. Discuss Project – Summary Up-to-date.
5. Discuss Project – Continued Implementation

11:05 **Subcommittees**

- **Chairman Reports:**
 - Land Information – Brian Palaia/Marcia Vlaun
 - Water Information (Water Quality) – Joyce Brown
 - Communications – Rick Stevens/Greg Leonard (Marc Cohen)
 - Consultant Procurement - Mike Murphy / Steve Masalin
 - GIS – Karl Asimovic/ Bob Congdon

12:05 **Lunch**

12:15 **Wrap up / Schedule next meeting (Date & Site)**

SOURCE WATER PROTECTION PROGRAM MEETING MINUTES

Re: Drinking Water Quality Management Plan

A Source Water Protection Meeting for the establishment of a Drinking Water Quality Management Plan was held at the Groton Utilities Operations Complex Julio H. Leandri Administration Building Conference Room on June 21, 2007 at 9:30am.

- Present were:
 - Lori Mathieu DPH
 - Chi Ho Sham VP CADMUS Group
 - Jo Ann CADMUS Group
 - Eric Thomas DEP
 - Al Dion Groton Utilities
 - Rick Stevens Groton Utilities
 - Joyce Brown Groton Utilities
 - Karl Acimovic Consultant, Groton Utilities
 - Ron Bata Groton Utilities
 - Marc Cohen Atlantic States Rural Water
 - Sidney Van Zandt Groton Resident
 - Joan Smith Groton Open Space Association
 - Dave Bjerklie USGS
 - Deb Jones Town of Groton
 - Michael Schaefer City of Norwich
 - Alicia Betty Trust for Public Land

Items of discussion:

Al Dion Comments:

- Opened the meeting by welcoming and thanking everyone for attending and for all their contributions.
- Introductions around the room.
- Introduced Guest Speaker:
 - Dave Bjerklie, USGS – United States Geological Survey

Lori Mathieu Comments:

- Introduced DEP Report showing no impaired water supply reservoirs in the state of Connecticut.

Eric Thomas Comments:

- There is no assessment in the state of Connecticut on supplying reservoirs.

Al Dion Comments:

- CCR
 - Mailed to all GU customers.

ALL

- Short open discussion on course, all agreed excellent course.

Chi Ho Sham Comments:

- Discussed the group ETV, Environmental Technology Verification
 - Possibly another group to contact for assistance.

ALL

- Question of water run-off into the reservoir from the Marriott Hotel.
- Discussion of Storm Water Basins at Groton Utilities and at the Marriott Hotel.

Al Dion Comment:

- GU Operations Complex is not required to have a storm water basin, however, research is being conducted designing on since the reservoir is in the area.
- Discussed Marc Cohen and Atlantic States involvement and plan for Ledyard and community.
- Funding still in progress. \$200,00 remains an item on legislative budget.
- Thames River Regional Water Interconnection process.
- Introduced Dave Bjerklie, USGS as guest speaker who will be speaking on Water / Land Resource Assessment utilizing Pomperaug River Project as an example.

ALL

- Open discussion on how this model scaled down to a level for the five (5) reservoirs this DWQMP encompasses and how it could be an asset.

Chi Ho Sham Comments:

- Discussed the Plan process handout.
- Handout could be used as structure to expand out one specific item to show committee updates.
- Peer review process to aid in making final decisions on processes and findings.

Sidney VanZandt Comment:

- Establishment of Development Rights could be a possibility if there are parcels of land designated as areas where no development should occur.

Chi Ho Sham Comment:

- There are many types of rights and many ways to compensate for developers.
 - Tax Breaks
 - City / Town Agreement Documents
 - Etc.
- Discussed legislative / regulatory requirements being out of the committee's hands.
- Discussed funding.

Sidney VanZandt Comments:

- There may be other towns or communities that have examples of regulations to use as guidelines as to what BMP our DWQMP Committee could use for guidelines.

Eric Thomas Comments:

- An inventory or library of local area guidelines plus state and federal guidelines could be a good starting point for consultant use.

Chi Ho Sham Comments:

- The question of Plan updates has come forward.
- We may be getting ahead of ourselves looking at Plan updates.
- The Plan should be finalized prior to figuring frequency of updates.
- At our current process level, recommend annual updates.

Eric Thomas Comments:

- Questioned the vision statement and how the process of performance measures measured up to the statement.
- Vision statement focuses on drinking water quality.
- There are other watershed measures that are discussed at these meetings that are not involved in the vision statement.

Chi Ho Sham Comments:

- A process of committee item approval needs to exist.
- Currently there is no answer of exactly whom the Oversight Committee consists of.
- A previous action item was to put the process plan on the web – internet.

Rich Stevens Comments:

- DWQMP Icon is now on the GU Website.
- The plan is to set up a comment block for public to utilize.
 - It was agreed it would be an action item for the Communications Subcommittee to answer the public's emails.
- Discussion of the trail tours.
 - Two tours provided
 - Two people attended the first.
 - Five people attended the second.
 - Town of Groton advertising could have been a problem area.

Al Dion Comments:

- The lack of interest in the tours confirms the continually raised question of, "Should the reservoirs / watershed be open to the public?"
 - Not enough people take interest in the surroundings or the watershed in general to open it up.
- Hold off until September to hold another meeting.
 - This will give the Subcommittees the ability and time to meet and work on their action items and goals.
- Subcommittee updates:
 - Land Information.
 - Co-chair not in attendance, update at next meeting.
 - Water Information Subcommittee (Joyce Brown)
 - Watershed Monitoring Program (Handout)
 - Quality Testing
 - Testing Frequency
 - Sampling Procedures
 - Discussed Consultant (Kortman Ecosystems) past recommendations.
 - Trending all data.
 - 2007 / 2008 Budget, possibility of hiring a Source Water Manager.
 - Working with DEP On streamflow limitations.
 - Next study is planned to be nutrient model.

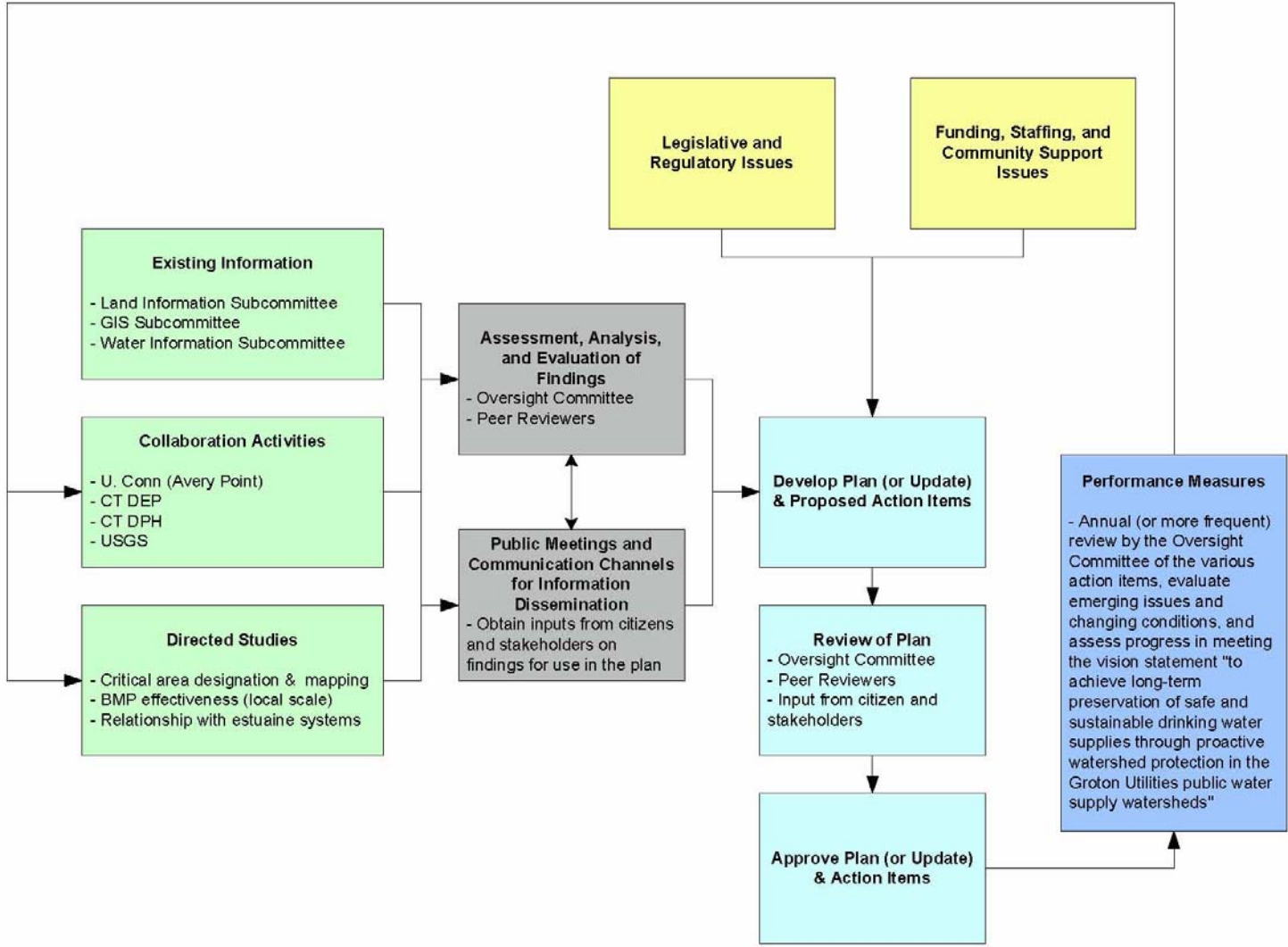
Eric Thomas Comment:

- It would be interesting to review the manganese events.
- Introduced the possibility of soliciting Chuck Lee, DEP, to review studies and make recommendations to the committee.

Al Dion Comments:

- Thank everyone for attending, offered lunch.
- Next meeting will be Thursday, September 27, 2007 at 9:30am at the Groton Utilities Operation Complex in the Julio H. Leandri Administration Building Conference Room.

Meeting adjourned.



Drinking Water Quality Management Plan Process

Drinking Water Quality Management Plan per SA06-6

Progress Report

Prepared by Laurie Giannotti, April 2007

SUMMARY

Groton, Norwich, Ledyard, Preston, Montville and Waterford, the communities who drink water provided by Groton Utilities (GU) are working together on a Drinking Water Quality Management Plan (DWQMP) to insure that the sources of their drinking water will be protected as the region grows. In May special act 06-6 was passed which requires the development of the DWQMP in addition to review by the CT Departments of Public Health (DPH), Environmental Protection, Public Utility Control and the State Office of Policy and Management. On or before January 1, 2009, the DPH is required to submit the department's findings and recommendations, including specific recommendations concerning necessary statutory changes to the joint standing committees of the General Assembly that oversee planning and development, environment, public health, and energy and technology. This proactive collaboration has caught the eye of The US Environmental Protection Agency.

The DWQMP is a grass roots initiative intended to balance the need for economic development while protecting the watershed of the drinking water supply reservoir. Seven working committees have been meeting (Oversight, Communication, Land and Water Information, and GIS, Consultant Procurement and Advisory) over the last year and have developed a DWQMP. The Committees meet monthly at GU's facility and are now working on implementation of the DWQMP engaging in tasks such as land use measures, water quality monitoring, and community education and outreach programs. Up to date information is presented on the project's website: http://www.grotonutilities.com/water_dwqmp.asp.

ACCOMPLISHMENTS

July thru September, 2006

- DWQM Plan finalized. Cadmus deliverable 1 presented (*attached*).
- Began discussions of forming subcommittees and general governance.
- DWS performed site plan review (under PA0653) for Fawn Drive in collaboration with GU and other Oversight Committee members.
- A document containing the projects history was compiled by GU, reviewed by DWS and others and placed on the DWQMP website (listed above).
- Proposal presented to request funding from the CT DEP's Clean Water Act Section 319 Grants Program (*attached*).

October thru December, 2006

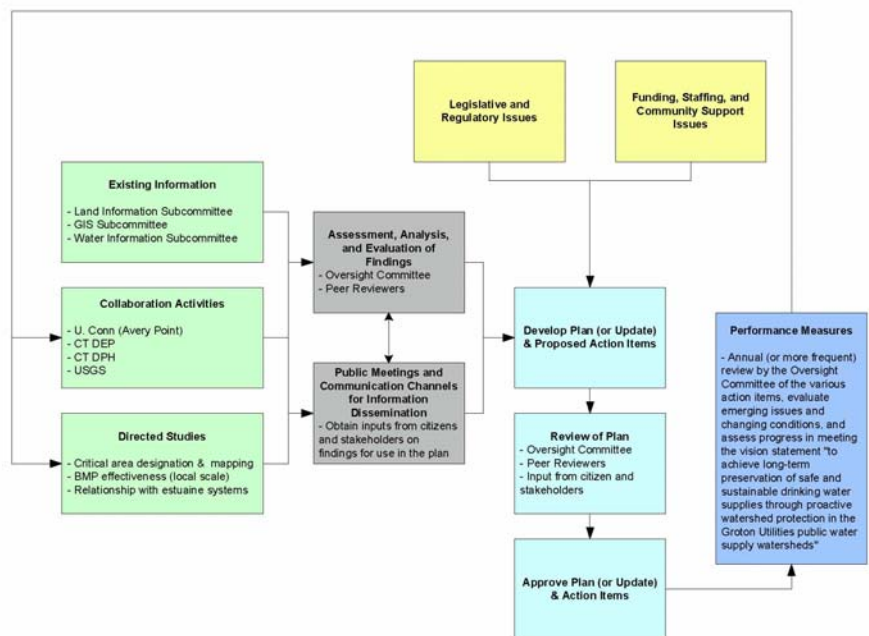
- Subcommittee structure, membership and initial task lists to begin DWQMP implementation finalized (*attached*).
- List of potential work items for consultant(s) developed (*attached*).
- DWS to act as facilitator to subcommittees until consultant is acquired.
- Project implementation timeline established (*attached*).

January thru March, 2007

- GU begins to hold informational meetings with municipal staff and commissions.
- Project selected to participate in the 18th Annual Nonpoint Source Conference, May 2007(attached).
- Guest speakers added to monthly Oversight Committee meetings. Sally Herald The Nature Conservancy’s manager of their Saugatuck River Watershed project guest speaker at February meeting.
- Met with UConn NEMO Project to discuss potential collaboration to complete consultant work items identified by the DWQMP. As a result, Dr. Dietz guest speaker on Low Impact Development (LID) at March meeting.
- GU prepared informational article for SWCOG newsletter.
- First draft of Planning Process (attached) developed (DWQMP Goals 3&5).
- Atlantic States Rural Water & Wastewater Association brought on to work with the Communications Committee to prepare an Education & Outreach Plan (DWQMP Goal 4, Objectives 1,5). Rural Water’s work plan is attached.
- Water Information Committee prepared draft sampling plan and work plan to complete DWQMP Goal 1 Objective 1a).
- Land Information Committee had its initial meeting in Ledyard and in cooperation with GU have begun work on identifying areas of the watershed that are critical to drinking water quality.

CONTINUING PROJECT IMPLEMENTATION

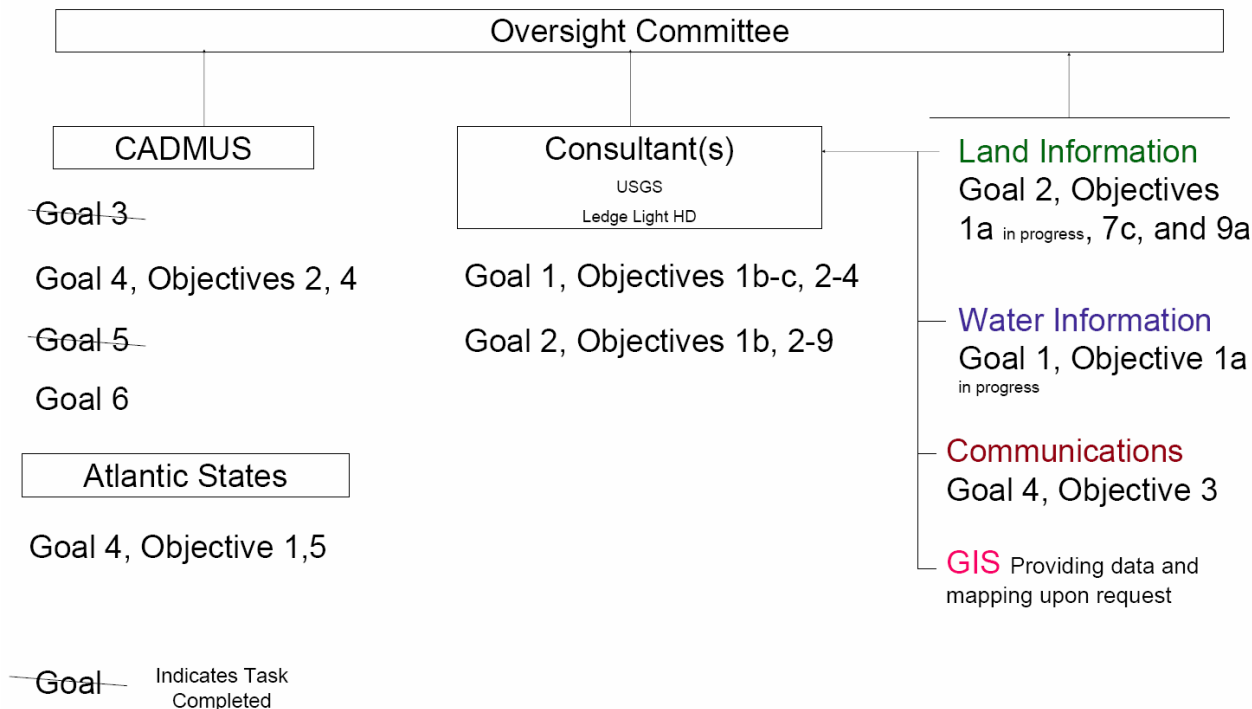
Implementation of the DWQMP will continue through 2008. The Oversight Committee has adopted a planning process (right) that will ensure that the document is kept current and “living”. With the Oversight Committee in charge of keeping the process running as well as assuring that any consultants produce the required deliverables the DWQMP will successfully protect the area’s public water supply. As shown below on the “Work Flow Chart”, tasks (Goal 1 & 2 specifically) that are currently assigned to a consultant(s) may be acquired by either USGS or Ledge Light Health District



Drinking Water Quality Management Plan Process

in the near future. This will leave minimal work for an additional consultant(s). The Subcommittees will simply have to provide input and some guidance to Atlantic States, Cadmus, etc... to achieve their goals.

Drinking Water Quality Management Plan **Work Flow Chart**

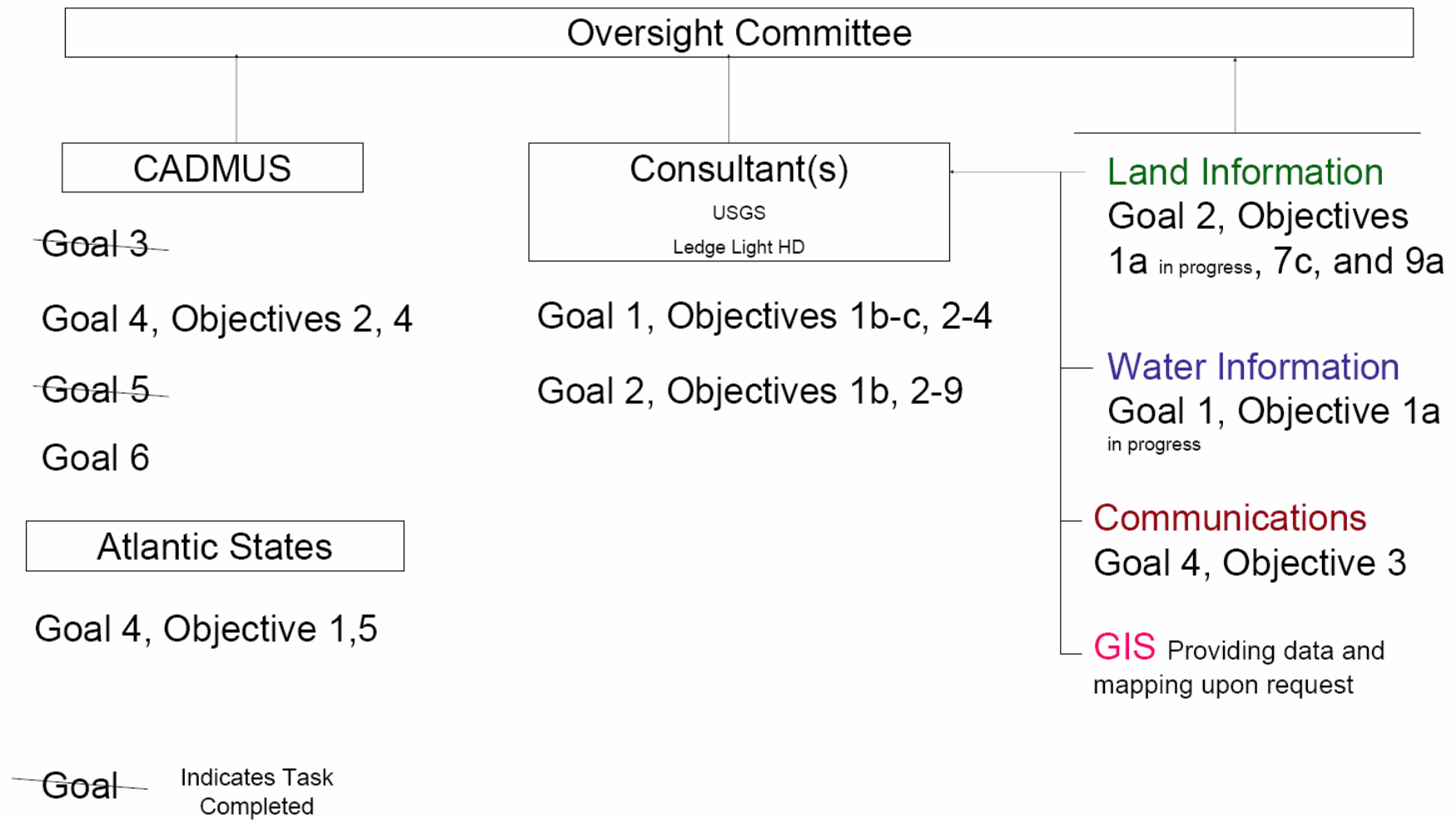


RECOMMENDATIONS

1. The Oversight Committee needs a dedicated (full-time would be best to provide the group with the most continuity, insight and motivation) facilitator/manager, DWS has been acting in this capacity. Responsibilities of this manager should include:
 - Monitoring and facilitating the Planning Process. For example, making sure that performance measures are assessed, updates occur and action items are finalized;
 - Update the DWQMP regularly as specified by the Oversight Committee;
 - Act as manager for any hired consultant(s) to track deliverables;
 - Working with Sub Committee Co-Chairs to organize (obtain locations for meetings, etc..) meetings;
 - Working with Sub Committee Co-Chairs to and finalize committee work plans and schedules;
 - Facilitate Sub Committee meetings;
 - Track all committee progress and performances;
 - Keep the website current either by managing a consultant or performing updates personally.
 - Prepare any written summary documents required by the Oversight Committee;

2. Recruitment of subcommittee members is critical. Atlantic States should be supported in leading this initiative.
3. The group should consider hiring a ‘marketing’ professional to prepare elements of the Education and Outreach Plan (being developed by the Communications Committee and lead by Atlantic States) such as regular press releases, public service announcements, etc.
4. The group should consider hiring a researcher(s) (or summer college student(s) perhaps) to complete DWQMP objectives such as 1.4 (h) *Review existing water protection regulations and determine gaps and prepare a list*. Appropriate objectives can be identified by each subcommittee.

Drinking Water Quality Management Plan Work Flow Chart



- CADMUS

- Goal 3 – **COMPLETE**

Goal 3 *Implement an open and efficient drinking water protection process*

Objective 1: Use a responsible and open practice to keep the planning process transparent and equitable

Oversight Committee Tasks:

- a) Work with Communications Committee to define the process (e.g., involve citizens and stakeholders)
- b) Provide examples and models

Objective 2: Implement a high quality standard for efficient plan revisions, implementation and fiscal accountability

Oversight Committee Tasks:

- a) Define quality standards
- b) Evaluate efficiency and costs

Objective 3: Be responsive to emerging issues and established priorities

- a) Develop a chain of command or ladder of responsibility
- b) Work with Communications Committee to develop a model for prompt response

- Goal 4 – Objectives 2 & 4

Goal 4 *Effectively inform and involve stakeholders and citizens*

Objective 2: Provide analyses and implications of the Drinking Water Quality Management Plan Advisory Committee Tasks:

- a) Perform analyses on a community basis and watershed basis to determine the effectiveness of the plan.

b) Provide lessons learned and suggestions for improvements.

Objective 4: Specify citizens' role in protecting drinking water quality Oversight Committee Tasks:

a) Define roles for the citizens

o Goal 5 – **COMPLETE**

Goal 5 *Develop a process for Plan review and updates*

Oversight Committee Objectives and Tasks: To be defined

o Goal 6

Goal 6 *Develop a model plan for the state*

Advisory Committee Tasks: To be defined

Objectives:

1. Identify and articulate a process for other parts of the state to develop their Drinking Water Quality Management Plans
2. Create a long-term vision for developing and implementing a holistic approach for the development of Drinking Water Quality Management Plan to protect and preserve drinking water quality (i.e., using science and common sense focusing on minimizing and eliminating risk to public health)
3. Provide an atmosphere or culture of using trust, teamwork, collaboration, and equity to achieve results
4. Encourage innovative and continuous improvement to the implementation of the Drinking Water Quality Management Plan
5. Provide opportunities to ensure the Drinking Water Quality Management Plan is maintained as a living document

- **CONSULTANTS – USGS; Ledge Light Health District**
 - Goal 1, Objectives 1b-c, 2-4

Goal 1 *Preserve Drinking Water Quality and Protect Public Health*

Objective 1: Develop and maintain baseline water quality data

Water Information Committee Tasks:

- a) Define Water Quality Parameters – Develop a list of what we are going to monitor and why.
- b) Gather raw water quality & present – (tracking rural water, queries) – Develop a list of existing information sources (also note format, for example, digital or reports) and types of information (parameters and sample types).
- c) Sharing data across communities and conduct data survey.

Objective 2: Establish current status and baseline conditions for drinking water quality

Water Information Committee Tasks:

- d) Baseline graphic for baseline - Obtain the relevant information from **b** above and use the information to report on the 'current' conditions for the parameters established in **a** above.
- e) Determine gaps – Conduct an assessment of gaps in information both geographic (are we missing headwater streams?) and parameters. Suggest new monitoring program based on this information.

Objective 3: Identify areas that contribute to the degradation of drinking water quality

Water Information Committee Tasks:

- f) Point sources- discuss with GIS Committee to obtain a map of known sources. Discuss additions with Land Information Committee and other appropriate work groups to complete map.
- g) Non-Point sources - create a list of potential sources; have discussions with Land Information Committee, local health, state health, etc. Work with GIS Committee to create base map and identify potentials on the base map.

Objective 4: Assess impacts from permitted facilities and activities on drinking water quality

Land Information Committee Tasks:

- h) Review existing water protection regulations and determine gaps and prepare a list.
- i) Prepare a strategy for addressing gaps in local water protection regulations.
- j) Source Water Protection - prepare a summary or list from the Source Water Protection reports.
- k) Source Water Protection Plus – prepare a list of suggested additions to the summary or list.

- o Goal 1, Objectives 1b-c, 2-4

Goal 2 *Proactively Protect Critical Watershed Areas through Land Management*

Objective 1: Identify areas that are critical to the preservation of drinking water quality

Land Information Committee Tasks:

- a) Define critical areas – Create a list of characteristics and criteria that make an area important for drinking water protection. This may require research with other work groups and outside experts.
- b) **Critical lands analysis - Work with GIS Committee to prepare a map displaying these critical areas.**

Objective 2: Evaluate and recommend effectively methods for protecting these critical areas

Land Information Committee Tasks:

- c) Define BMP's – Using the results from Goal 1, objectives 3 & 4 to create a list of resources where BMPs for those threats of concern can be obtained. Make sure to find out if you can get digital information or link to a website.
- d) Identify & select appropriate (ID & analyst, local & state, COG) – prepare a preferred “list” of BMPs selected in c above.
- e) Review existing land protection regulations and determine gaps and prepare a list. (be sure to avoid overlap with Goal 1, h and i)
- f) Prepare a strategy for addressing gaps in local land protection regulations.

Objective 3: Develop useable tools for land use decision makers to evaluate protective approaches

Land Information Committee Tasks: For the following, based upon threats of concern, research existing approaches that might be useful for our watershed, work with other work groups to select the most appropriate:

- g) Memoranda of Understanding (MOUs)
- h) Towns ordinance
- i) Identify/recommend toolbox select – Put together a publication appropriate for our website that contains the most appropriate tools.
- j) If necessary, formulate and propose new regulations.

Objective 4: Identify areas for higher density development and establish agreements to facilitate effective protection of drinking water quality (e.g., transfer of development right and development of cost-effective and protective infrastructure for water and sewer)

Land Information Committee Tasks:

- a) Define characteristics that make an area suitable for higher density development.
- b) Define appropriate development within these critical areas established (for preservation versus development)
- c) Work with GIS Committee to prepare a map of these areas.
- d) Define BMPs (could be different for each town)- Research and develop a list of
- e) Options regarding sewer avoidance provision

Objective 5: Promote the use of low impact development techniques for new development (e.g., through the development of agreements and local ordinance)

Land Information Committee Tasks:

- a) Define low impact development (LID) – e.g., using Stormwater Manual
- b) Identify LID toolbox
- c) Use of Website of LID
- d) Recognize the unique aspects of drinking water supplies
- e) Identify various models for developers

Objective 6: Develop tools and programs to reduce contamination threats (e.g., using pollutant trading incentive and “outside” funding)

Land Information Committee Tasks:

- a) Evaluate requirements and assess if this type of program make sense in Connecticut
- b) If applicable, prioritize these tools and programs

Objective 7: Develop standards of basic enforcement ordinances

Land Information Committee Tasks:

- a) Review existing ordinances
- b) Build model ordinances

Objective 8: Evaluate stormwater utility management (including feasibility)

Land Information Committee Tasks:

- a) Recap regulations
- b) Provide examples of successes and failures for review
- c) Work with Oversight and Advisory Committees to evaluate impacts

Objective 9: Work with developers, when appropriate to develop innovative treatment techniques

Land Information Committee Tasks:

- a) Prepare a list of potential partners.
- b) Categorize treatment techniques.
- c) Consider potential funding opportunities.

- **LAND INFORMATION**

- Goal 2, Objectives 1a – In Progress, 7c and 9a

Goal 2 *Proactively Protect Critical Watershed Areas through Land Management*

Objective 1: Identify areas that are critical to the preservation of drinking water quality

Land Information Committee Tasks:

- a) Define critical areas – Create a list of characteristics and criteria that make an area important for drinking water protection. This may require research with other work groups and outside experts.

Objective 7: Develop standards of basic enforcement ordinances

Land Information Committee Tasks:

- a) Review existing ordinances
- b) Build model ordinances

Objective 9: Work with developers, when appropriate to develop innovative treatment techniques

Land Information Committee Tasks:

- a) Prepare a list of potential partners.

- WATER INFORMATION

- Goal 1, Objective 1a – In Progress

Goal 1 *Preserve Drinking Water Quality and Protect Public Health*

Objective 1: Develop and maintain baseline water quality data

Water Information Committee Tasks:

- a) Define Water Quality Parameters – Develop a list of what we are going to monitor and why.

- COMMUNICATIONS

- Goal 4, Objective 3

Goal 4 *Effectively inform and involve stakeholders and citizens*

Objective 3: Offer easy access to information about the Drinking Water Quality Management Plan

Communications Committee Tasks:

- a) Provide Web-based access to the plan; events; process and data.
- b) Provide local town postings and meetings (calendar).