



# Department of Environmental Protection

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Governor

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Lieutenant Governor

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Secretary

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Commissioner

## Water Quality Monitoring Grant Program Request for Grant Proposals State Fiscal Year (SFY) 2020

### 1.0 GRANT OPPORTUNITY SUMMARY

- A. Proposals Sought:** Massachusetts Department of Environmental Protection (MassDEP) is seeking grant proposals from eligible entities outside of the agency for bacteria data collection and/or associated capacity-building to perform data collection or analysis in the future, with the goal of increasing the amount of bacteria data available for MassDEP's use in the assessment of primary and secondary contact recreation activities in surface waters of the Commonwealth.

**Grant Program Goal:** With more than 3,000 lakes and ponds and 12,000 miles of streams and rivers in the state, MassDEP's Watershed Planning Program (WPP) can sample just a small fraction of these surface waters in any given year. MassDEP's goal in presenting this grant opportunity is to supplement its own surface water quality dataset ("internal dataset") with data collected by groups outside of the agency ("external dataset"). To help meet this goal, MassDEP is soliciting grant proposals for the 2020 summer sampling season (i.e., from April 1<sup>st</sup> to October 15<sup>th</sup>) to support eligible entities in the collection of bacteria data in surface waters. This external dataset will enhance the amount and spatial coverage of data that MassDEP can use in the assessment of primary and secondary contact recreation activities in surface waters of the Commonwealth.

MassDEP's internal data, and some external data collected by others, are used as the basis for assessing surface water quality in accordance with the requirements set forth in §305(b) and §303(d) of the federal Clean Water Act (CWA). In addition to the data collected by MassDEP staff, reliable data obtained from other state and federal agencies, local governments, drinking water utilities, volunteer organizations and other sources are also considered in MassDEP's surface water quality assessments. Use-attainment determinations (i.e., is the waterbody able to support swimming and boating?) are made for each waterbody for which adequate data and information are available. However, many waters are not assessed for one or both of these uses in any given 2-year assessment cycle. Therefore, many surface waters that were assessed in the past need updated information to determine the current condition of the waterbody, and many small and/or unnamed streams and ponds have never been monitored or assessed. For more information on MassDEP's water quality assessment process, the CALM, please see: <https://www.mass.gov/media/1838926/>.

The quality of the data used by MassDEP reflects project organization, extensive planning, the application of rigorous data quality objectives (DQO), and training in standardized field and laboratory procedures, metadata collection, and data verification. Collectively, the result of these actions is a scientifically-sound and legally-defensible dataset that can help MassDEP determine if a waterbody is meeting surface water quality standards (for more information on writing a Quality Assurance Project Plan (QAPP), see <https://www.mass.gov/guides/water-quality-monitoring-for-volunteers>). **MassDEP is in the process of developing a Bacteria Monitoring QAPP that will document general procedures that apply to all projects awarded under this Grant Program (the QAPP will be made available at the time of project award notification).** All successful grantees will be asked to review the QAPP to make certain they understand and agree to the general procedures. Grantees must also complete their own Sampling and Analysis Plan (SAP), which describes the aspects of the monitoring that are specific to their project (e.g., sample locations, sampling frequency, etc.). Completed SAPs must be submitted to MassDEP for review and approval.

All grantees must submit data before November 15, 2020. External data can be submitted to MassDEP's WPP data portal. Guidelines for submission of data to MassDEP's WPP data portal are located here: <https://www.mass.gov/guides/external-data-submittals-to-the-watershed-planning-program>. Alternatively, external datasets can be submitted through the national Water Quality Portal (WQP). The WQP is a cooperative service sponsored by the United States Geological Survey (USGS), the Environmental Protection Agency (EPA), and the National Water Quality Monitoring Council (NWQMC). It serves data collected by over 400 states, federal, tribal and local agencies. For access to the user's guide see this link: <https://www.waterqualitydata.us>. MassDEP staff can access external water quality data submitted through the National WQP. Eligible Entities must specify in their proposals, which method they plan to use for submittal of data.

- B. Eligible Entities and Projects:** Eligible Entities for this Grant Opportunity are limited to non-profit organizations, and can include watershed groups, lake and pond associations, academic institutions and other non-profit organizations with the ability to conduct bacteria monitoring and data collection, or who wish to develop this capacity. Previous grant awardees must be in good standing to be eligible for the current funding cycle. Good standing is defined as fulfilling all requirements and conditions under the SFY2019 water quality monitoring grants program.

Academic institutions will only be eligible for grants provided they primarily provide bacteria analysis services, on a no-cost basis, in partnership with other local non-profit organizations that are not academic institutions. Academic institutions must identify the local non-profit organization(s) that they will provide free sample analysis for in the grant application. Grants awarded to academic institutions would be primarily to reimburse the institutions for the direct and indirect costs associated with performing bacteria analyses on a no-cost basis on samples provided by other local partners (watershed groups, lake and pond associations, and other non-profit organizations with the ability to conduct bacteria monitoring).

Eligible Entities must describe in their proposals how the grant funding will support one or more of the following or similar activities for surface water bacteria monitoring data collection and/or to build capacity for surface water data collection.

- monitoring project design and planning (e.g., QAPP review and Sampling and Analysis Plans (SAP));
- purchase of monitoring equipment and supplies (e.g., enzyme-substrate analytical systems, incubators, reagents, sample containers);
- training in monitoring support areas (e.g., use of enzyme-substrate analytical systems, probe calibration, QA, data management and review);

- field staff for surface water bacteria monitoring specific to this project;
- technical assistance in data analysis and reporting; and/or
- technical assistance in formatting data submissions to MassDEP's external water quality data portal or the National Water Quality Portal (WQP).

**C. Ineligible Applicants and Projects:** Entities considering submitting a Grant proposal should note that the following Entities and/or projects are ineligible for this Grant funding:

- Applicants cannot propose projects that would be undertaken to comply with local or governmental enforcement actions such as State or Federal Administrative Orders or Consent Orders.
- Applicants cannot propose projects to implement specific requirements of National Pollutant Discharge Elimination System (NPDES) storm water permits.

**D. MassDEP Priority Data Needs:** Eligible entities should be aware that MassDEP has identified the following waters with Priority Bacteria Data Needs:

- Waters that have never been assessed for pathogens;
- Waters that have been assessed for pathogens historically, but for which there are no recent bacteria data; and
- Waters assessed as impaired for pathogens (Category 5 of the *Draft 2016 Massachusetts Integrated List of Waters*, <https://www.mass.gov/media/1638446/>).

It should be noted that *E. coli* and *enterococci* are the indicators of pathogenic contamination in freshwaters and *enterococci* is the indicator in marine waters.

**E. Application Deadline:** Applications are due by **12:00 p.m. on December 20, 2019**.

**F. Page Limit:** Grant applications must not exceed ten (10) pages in length, not inclusive of supporting documents (which can include resumes, short biographies, and/or project examples).

**G. Funding Availability:** MassDEP currently estimates that up to \$200,000 in total grant funding may be available for the water quality monitoring grants in SFY20. However, at a minimum, grant funding in the amount of \$160,000 will be available for this Grant program in SFY20. Applicants should note that MassDEP reserves the right not to award any grants for this program, and also reserves the right to award lesser grant award amounts, based on the quality and/or quantity of the proposals received. Individual grant awards shall not exceed \$15,000.

The estimated start date for all grant projects is March 1, 2020 (the formal start date will be identified on the fully executed grant contract following award). **The funding available for this grant program is available only for expenses incurred between the project start date and June 30, 2020.** Eligible Entities are encouraged, but not required, to plan and complete as many activities (i.e., monitoring project design and planning, purchase of monitoring equipment and supplies, training in monitoring support areas, and/or field time associated with surface water bacteria monitoring activities) by the June 30, 2020 deadline in order to maximize the use of grant funding to support the total cost of the project. In addition, Eligible Entities are encouraged to provide matching funds for any activities (i.e., field time associated with surface water bacteria monitoring activities, data analysis, and/or formatting and submitting data) which occur after June 30, 2020. See below for more information on acceptable forms of matching funds.

Eligible Entities should also note that the SFY20 grant funding awarded through this Program is on a

reimbursement basis, and Eligible Entities must provide documentation indicating that all costs for activities/equipment were completed by or before SFY end date of June 30, 2020.

NOTE TO APPLICANTS: Final field sampling datasets must be submitted to MassDEP following the conclusion of the monitoring season and not later than November 15, 2020. See Section 1.A. Grant Program Goal above for information on how to submit data.

- H. **Match Requirement:** While Eligible Entities are not required to provide matching funds, a match is preferred in order to obtain data for the full assessment monitoring season (April 1<sup>st</sup> – October 15<sup>th</sup>; with higher preference to projects that include sampling through September) and projects with a matching source of funding, including in-kind services and/or external funding will be weighed more favorably by the MassDEP review committee. There are no restrictions on how matching funds are provided (e.g., corporate, municipal government, etc.). Eligible Entities are encouraged to identify and describe in detail other known sources of matching funding for their proposed project on the Application Form, from both secured and anticipated sources.
- I. **Question and Answer Period:** Written questions can be submitted to the Grant Program Manager at [meghan.selby@mass.gov](mailto:meghan.selby@mass.gov) until December 4, 2019 at 12:00 p.m. A complete question and answer document will be posted on the MassDEP Website (<https://www.mass.gov/info-details/grants-financial-assistance-watersheds-water-quality>) by December 13, 2019. (See Estimated Procurement Calendar below).
- J. **Total Anticipated Duration of Grant(s):** The contract duration will be from the time of contract award date (estimated to be March 1, 2020) through December 31, 2020.
- K. **Close Out Memo:** By no later than November 15, 2020, all applicants shall submit a 1-page summary of how the project has met the goals in the proposal. Successful completion of project goals will be considered as part of the evaluation of good standing of applicants for potential future water quality monitoring grants programs.
- L. **Applicable Procurement Law:** Grants-- MGL c. 7A, § 7; St. 1986 c. 206, § 17; 815 CMR 2.00

## 2.0 INSTRUCTIONS FOR APPLICATION SUBMISSION:

- A. **Evaluation Criteria (general):** Eligible Entities must submit a completed application that includes all the required supporting materials, agreement to the program conditions, and the ability to meet the stated eligibility requirements, in order to be considered for a grant award. A MassDEP review committee will evaluate proposed projects based upon the criteria listed below. The review committee reserves the right to reject any or all proposals.

**Evaluation Criteria Components:** The review committee will evaluate and score the grant applications from Eligible Entities (as defined previously in this Grant Opportunity), based upon the following criteria:

### 1. Administrative Summary Completed (3 points)

Applicants will provide an administrative summary of their proposal including:

- Applicant's and partner(s)' mailing address, phone number and email contact information;
- Project title;

- Watershed(s) served by proposed project;
- Overall breakdown of spending by state fiscal year;
- Brief project summary;
- Principal contact information (name, title, email, and phone number); and
- The signature of an authorized signatory.

The administrative summary must use the format provided in Appendix A: Proposal Template – Administrative Summary.

## 2. Organizational Capacity (15 points)

Applicants must provide a narrative description of their organization and its current or future capacity to collect bacteria data or support local organizations' ability to collect bacteria data. The review committee's focus will be upon the following:

- What is your organization name?
- What year was it founded?
- What is your mission statement?
- What is your scope of watershed(s)? (e.g., number of towns, waterbodies covered, etc.);
- Who are the key staff that will be working on the project (i.e., resumes or short biographies for key staff)?
- Examples of similar work (if available).
- How this grant will support your organization's existing or future efforts to collect bacteria data and/or develop capacity for the collection of bacteria data, or how your academic institution will support local organizations' ability to collect bacteria data?
- How the project will support MassDEP in assessing swimming and boating uses (i.e., primary and secondary contact recreation)?
- Identify any challenges to meeting the goal of expanding your existing data collections. Specifically, the organization should identify any needs that are key to building capacity, including but not limited to planning support (QAPP and sampling and analysis planning), training in data management, Quality Assurance/Quality Control (QA/QC), data review, assistance in formatting the submission of data (i.e., to either the MassDEP state water quality data portal or the federal WQP) and/or purchase(s) of analytical equipment (e.g., enzyme-substrate analytical system, and or assistance in data analysis and reporting)?
- Academic institutions must identify the local non-profit partners that they will be providing no-cost bacteria sample analysis to and an estimate of how many samples will be processed.
- A description of your entity's ability to enter into a contract with MassDEP by the date specified in the Estimated Procurement Calendar.

## 3. Description of How Funding will be Used (15 points)

Applicants must provide a detailed breakdown of the individual tasks that make up the overall project. Tasks are to be content-specific, which result in a discrete deliverable product. The review committee's focus will be upon the following:

- How well does the applicant describe the proposed project and the work to be covered by this funding?
- If applicable, are sampling locations, frequency of sampling, and number of samples per site described?
- If applicable, is a locus map of the project area and a detailed map of the project site provided?

This section must use the format provided in Appendix A: Proposal Template – Scope of Services and must include the following for each task: a narrative summary, identify personnel, identify desired deliverables, and an estimated cost.

#### **4. Priority Data Needs (17 points)**

Applicants must provide a narrative description of their project in relation to MassDEP’s priority data needs. The review committee’s focus will be upon the following:

- How well does the applicant understand the context for data collections?
- Does the applicant’s program contribute to the collection of bacteria data in priority waters? (see also the description provided in **MassDEP Priority Data Needs** above).

#### **5. Project Budget and Cash Flow Schedule (15 points)**

Applicants must present a project budget for the expenditure of the grant funds. The review committee’s focus will be upon the following:

- How well does the applicant estimate and describe project costs?
- Does the applicant demonstrate a realistic understanding of project costs by providing a budget with detailed and credible cost estimates?
- What costs will be incurred in SFY 2020 (which ends on June 30, 2020)?
- Does the applicant identify and describe any in-kind service(s) or monetary match, either anticipated or secured, that will support data collection through September and data submittal by November 15, 2020?

This section shall include a project budget which is summarized in the format found in Appendix A: Proposal Template – Project Budget.

#### **6. Project Timeline (5 points)**

Applicants must submit a timeline which specifies the tasks and deliverables for the project, including when these activities commence and when the activities will be completed. The review committee’s focus will be upon the following:

- How well does the applicant specifically describe the timeline for the proposed work?
- Is that a reasonable amount of time for the described tasks to be accomplished?
- Can the project be feasibly completed, and relevant deliverables submitted in accordance with the proposed timeline?

This section shall include a project timeline which is summarized in the format found in Appendix A: Proposal Template – Project Timeline.

#### **7. Project Benefit (30 points)**

Applicants must provide a narrative description of how and to what extent the proposed project furthers the agency’s strategic monitoring goals of assessing primary and secondary contact recreation activities in the Commonwealth’s surface waters. The review committee’s focus will be upon the following:

- How will the project enhance the availability of bacteria data that can be used to support MassDEP’s CWA Programs? Preference will be given to proposals which commit to submitting data to the MassDEP data portal and demonstrate plans to collect enough data and associated quality assurance/quality control sufficient for use in MassDEP water quality assessments.
- Does the project provide a sampling frequency and duration that is aligned with proposed surface water quality standard revisions and MassDEP assessment requirements (at a minimum

sampling conducted every other week consistently between April 1<sup>st</sup> and October 15<sup>th</sup>, with higher preference to projects that include sampling through September)?

- Is match provided to continue to collect bacteria data from July 1<sup>st</sup> to September 30<sup>th</sup> and process and submit data?
- Are the proposed sampling locations consistent with the **MassDEP Priority Data Needs**?
- Are improvements in planning for capacity building (e.g., QAPP, SAP, formatted data submission through MassDEP's external data portal or the federal WQP portal, and/or purchase of supplies and equipment) proposed?

## **B. Application Completion and Submission Instructions:**

### **Complete proposals will consist of:**

- **A concise application** documenting compliance with all the evaluation criteria (10-page limit including narrative and template documents; see Appendix A for format and see the **Evaluation Criteria** section for more detail):
  - 1. Administrative Summary (Appendix A format);
  - 2. Organizational Capacity (narrative description);
  - 3. How Funding Will be Used (Appendix A format);
  - 4. Priority Data Needs (narrative description);
  - 5. Project Budget and Cash Flow Schedule (Appendix A format);
  - 6. Project Timeline (Appendix A format); and
  - 7. Project Benefits (narrative description).
- **Supporting documents** (no page limit):
  - Resumes or short biographies for key staff; and
  - Project examples (if available).

**Complete proposals must be submitted electronically, via email, by 12:00 p.m. on December 20, 2019, to:**

### **Grant Program Manager:**

Meghan Selby  
Massachusetts Department of Environmental Protection  
Watershed Planning Program  
8 New Bond Street  
Worcester, MA 01606  
[meghan.selby@mass.gov](mailto:meghan.selby@mass.gov)  
(508) 767-2893

In the subject line of the email, applicants must write their organization's name followed by "MassDEP Water Quality Monitoring Grant Program" (i.e. "Applicant's Name – MassDEP Water Quality Monitoring Grant Program"). **Documents must be submitted in Microsoft Word format.**

**All applications must be received by MassDEP by 12:00 p.m. (NOON) on Friday, December 20, 2019.**

Applications received after the deadline will be rejected automatically. MassDEP reserves the right to reject any and all proposals or request additional information if needed.

### **Additional Required Documentation:**

All applicants awarded a grant through this program will, at a minimum, be required to complete and execute the following five (5) contract forms:

- i. Commonwealth Terms and Conditions filled out and signed by the applicant  
<http://www.macomptroller.info/comptroller/docs/forms/contracts/CommonwealthTermsAndConditions.pdf>;
- ii. Commonwealth Standard Contract Form, filled out and signed by the applicant  
<http://www.macomptroller.info/comptroller/docs/forms/contracts/StandardContractForm.docx>;
- iii. Commonwealth W-9 tax information form filled out and signed by the applicant with DUNS number and Federal Tax ID  
<http://www.macomptroller.info/comptroller/docs/forms/vendorcustomer/newmass-w9.doc>;
- iv. Contractor Authorized Signatory Listing Form  
<http://www.macomptroller.info/comptroller/docs/forms/contracts/casl-form.docx>; and
- v. Electronic Funds Transfer (EFT) form  
<https://massfinance.state.ma.us/VendorWeb/eftRegisterfrm.asp>.

Applicants are encouraged to review these forms prior to submission of an application.

**ESTIMATED PROCUREMENT CALENDAR FOR GRANT APPLICATION/AWARD:**

<b>Procurement Activity</b>	<b>Date</b>	<b>Time</b>
Notice of Grant Opportunity – Posted on COMMBUYS AND MASSDEP WEBSITE	November 20, 2019	
Request for Grant Proposals and Application Release Date (Posting Date) – Posted on MASSDEP WEBSITE	November 20, 2019	
<b>Deadline for Submission of Questions to MassDEP via email to:</b> <a href="mailto:meghan.selby@mass.gov">meghan.selby@mass.gov</a>	<b>December 4, 2019</b>	<b>12:00 PM (NOON)</b>
Official Answers for Q&A published on MassDEP website on or before	December 13, 2019	
<b>GRANT APPLICATION DEADLINE; ELECTRONIC SUBMISSION TO:</b> <a href="mailto:meghan.selby@mass.gov">meghan.selby@mass.gov</a>	<b>December 20, 2019</b>	<b>12:00 PM (NOON)</b>
Notification of Grant Award(s) (Estimated) – POSTED ON COMMBUYS AND MASSDEP WEBSITE	January 2020	
<b>Mandatory Post Award Meeting</b> MassDEP – Central Regional Office 8 New Bond Street Worcester, MA 01606	February 2020	
Estimated Contract Start Date	March 2020	

**APPENDIX A – PROPOSAL TEMPLATE**  
**WATER QUALITY MONITORING GRANTS PROGRAM - STATE FISCAL YEAR 2020**

**ADMINISTRATIVE SUMMARY**

<b>APPLICANT ORGANIZATION:</b> Address:  Telephone: eMail: <b>CONTRIBUTING PARTNERS:</b> Address:  Telephone: eMail:
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**PROJECT TITLE:**

**WATERSHED(S) SERVED BY THIS PROJECT:**

**AMOUNT OF FUNDING REQUESTED AND LOCAL MATCH (IF ANY) PROPOSED:**

	<u>State Fiscal Year 2020</u> (July 1, 2019-June 30, 2020)	<u>State Fiscal Year 2021</u> (July 1, 2020-June 30, 2021)
State Funds via MassDEP	\$	[REDACTED]
Cost Share Proposed (not required)	\$	\$

**PROJECT SUMMARY/OBJECTIVES:**

**PRINCIPAL CONTACT:**

\_\_\_\_\_  
 Name and Title

\_\_\_\_\_  
 eMail

( ) \_\_\_\_\_  
 Telephone

**AUTHORIZED SIGNATORY:**

\_\_\_\_\_  
 \_\_\_\_\_  
 Signature and Title required                      Date

**APPENDIX A – PROPOSAL TEMPLATE**  
**WATER QUALITY MONITORING GRANTS PROGRAM - STATE FISCAL YEAR 2020**

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**SCOPE OF SERVICES**

Please provide a brief descriptive summary for each objective or task/activity, followed by the personnel, deliverable product(s) or outcomes(s) to be complete, and cost. Tasks are to be content-specific which result in discrete deliverable products:

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**OBJECTIVE / TASK #1:**

SUMMARY:

PERSONNEL:

DESIRED OUTCOME(S): A)  
  B)  
  C)

COST:

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**OBJECTIVE / TASK #2:**

SUMMARY:

PERSONNEL:

DESIRED OUTCOME(S): A)  
  B)  
  C)

COST:

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(Repeat as necessary.)

**APPENDIX A – PROPOSAL TEMPLATE**  
**WATER QUALITY MONITORING GRANTS PROGRAM - STATE FISCAL YEAR 2020**

**PROJECT BUDGET**

(This budget is for proposal evaluation purposes. Use whole dollar method.)

Expense Items	Grant Amount (up to June 30 <sup>th</sup> )	Cost Share	Total Amount
Applicant's Salary – By title and salary range			
Sub-contractual Services			
Equipment			
Supplies (including printing, mailing)			
Travel (for mileage only @ 0.45 cents/mile)			
Other			
Total Amounts:	\$	\$	\$

OVERHEAD RATE (%): \_\_\_\_\_%

TOTAL REQUEST FOR GRANT:       \$\_\_\_\_\_       (State Funds via MassDEP through June 30<sup>th</sup>)

TOTAL COST SHARE:               \$\_\_\_\_\_       (Not Required)

TOTAL BUDGET AMOUNT:         \$\_\_\_\_\_

**APPENDIX A – PROPOSAL TEMPLATE**  
**WATER QUALITY MONITORING GRANTS PROGRAM - STATE FISCAL YEAR 2020**

**PROJECT TIMELINE**

Provide a timeline for each project task by placing an “X” within the months the activity is expected to occur. If the activity consists of making a purchase that should be represented by “X-ing” the month when the purchase is expected to occur.

TASK	MONTH									
	March	April	May	June	July	August	Sept.	October	Nov.	
Task #1										
Task #2										
Task #_										
Task #_										
Task #_										
Task #_										
Repeat as necessary										
	<b>Grant Funding Available</b>					<b>NO Grant Funding Available</b>				

## **APPENDIX B – GENERAL GUIDANCE**

The following information in this appendix serves as a general guidance to assist Applicants in their preparation of proposals and focuses upon important considerations related to each organization's survey planning, sampling, and analysis for bacteria. After Grant Award, grantees will be required to provide more detail in the grantee's draft Sampling and Analysis Plan (SAP) submitted to MassDEP for approval (or in an existing previously-DEP-approved QAPP).

- Water Resources to sample: rivers, streams, lakes, ponds (pipe discharges can also be sampled but will not be used in assessments of ambient waters).
- Freshwater Indicator: *E. coli* and or enterococci bacteria
- Marine Indicator: enterococci bacteria
- MassDEP-approved monitoring QAPP required prior to sampling & analysis? YES
- Safety considerations for sampling crews: YES (described in QAPP and/or SAP). Sampling teams of two persons are recommended.
- Is training documentation required? YES (described in QAPP and/or SAP)
- Data Quality Objectives? YES (described in QAPP and/or SAP)
- Sampling Period: Bathing and contact season (April 1<sup>st</sup> – October 15<sup>th</sup>; June-September is preferred)
- Sampling Frequency: bi-weekly (every other week) for all non-bathing waters, from June-September is preferred. These frequencies will ensure an adequate sample number within the 90-day averaging period to determine criteria evaluations.
- Number of sampling locations: As many as can be accomplished within budget.
- Sampling Methodology: simple grabs, wade-in, representative of waterbody (described in QAPP and/or SAP).
- Sample Containers: sterile (w/ dechlorination as appropriate)
- Analytical Methods: SM 9223B, EPA 1603 (*E. coli*); EPA 1600, SM 9223B, ASTM D6503-99 (enterococci)
- Analytical holding Times: 8 hours. To be met for all sample results.
- Is QC sampling required? YES. Collect sequential or simultaneous field duplicates at a rate of one minimum per lab batch of samples and at least once per season for each sampling crew. Also, collect field blanks using sterile deionized water or an appropriate source of reagent water at a rate of 10% of total samples.
- Analytical lab services: in-house or private lab is acceptable. MA certification in the specific bacteria method is preferred but not required. In any case, MassDEP-approval of lab-specific protocols (standard operating procedures) for analysis is required as part of QAPP/SAP approval.
- Analytical reagents: All reagents used in lab analyses shall be unexpired and from a reputable source
- Lab QC sampling? YES. Minimum of one lab duplicate and one lab blank per batch of samples
- Lab proficiency testing? Optional, but preferred (using appropriate QC testing materials; describe in QAPP)
- Data review and validation: Grantees are expected to critically review the resulting data and qualify or censor data as needed that do not meet project specifications, prior to submitting final data to MassDEP.
- Data submittal to MassDEP or through WQP? YES.
- Close Out Memo to MassDEP? YES, a summary of how the project met the goals in the proposal and expenditures is required by November 15, 2020.