NORTH COAST RESOURCE PARTNERSHIP
2018/19 IRWM Project Application

The North Coast Resource Partnership (NCRP) 2018/19 Project Application Instructions and additional information can be found at the NCRP 2018/19 Project Solicitation webpage (https://northcoastresourcepartnership.org/proposition-1-irwm-round-1-implementation-funding-solicitation/). Please fill out grey text boxes and select all the check boxes that apply to the project. Application responses should be clear, brief and succinct.

Project Applications will be accepted until 5:00 pm, ~~March 8, 2019~~ **March 15, 2019.** It is important to save the application file with a distinct file name that references the project name. When the application is complete, please email to kgledhill@westcoastwatershed.com

If you have questions, need additional information or proposal development assistance please contact:

- Katherine Gledhill at kgledhill@westcoastwatershed.com or 707.795.1235
- Tribal Projects: Sherri Norris, NCRP Tribal Coordinator at sherri@cieaweb.org or 510.848.2043

Project Name: Storm Water Trash Capture Devices

A. ORGANIZATION INFORMATION

1. **Organization Name: City of Fort Bragg**

2. **Contact Name/Title**
   Name: Chantell O'Neal
   Title: Engineering Technician
   Email: coneal@fortbragg.com
   Phone Number (include area code): 707-961-2823 x 133

3. **Organization Address (City, County, State, Zip Code):**
   416 North Franklin Street
   Fort Bragg, Mendocino County, California, 95437

4. **Organization Type**
   ☒ Public agency
   ☐ Non-profit organization
   ☐ Public utility
   ☐ Federally recognized Indian Tribe
   ☐ California State Indian Tribe listed on the Native American Heritage Commission's California Tribal Consultation List
   ☐ Mutual water company
   ☐ Other:

5. **Authorized Representative** (if different from the contact name)
   Name: Tabatha Miller
   Title: City Manager
   Email: tmiller@fortbragg.com
   Phone Number (include area code): 707-961-2823 x 102

6. **Has the organization implemented similar projects in the past?** ☒ yes ☐ no
   Briefly describe these previous projects.
   The City of Fort Bragg has implemented a number of projects funded with Prop 1 and similar funding sources. The most recent projects included installing a new 1.5 million gallon water tank on Cedar Street with CDBG funds, the Summer's Lane Reservoir project, a 45 acre-foot water storage reservoir funded with IRWM Prop 1 funds, and the green alleys project a Prop 84 funded grant to re-construct three alleys using Low Impact Development (LID) to improve storm water quality.

7. **List all projects the organization is submitting to the North Coast Resource Partnership for the 2018/19 Project Solicitation in order of priority.**
   1. Pudding Creek Water Line Relocation
   2. Storm Water Trash Capture Devices

8. **Organization Information Notes:**
   The City of Fort Bragg qualifies as a Severely Disadvantaged Community (SDAC)
   The City of Fort Bragg is a designated Phase II Municipal Separate Storm Sewer System (MS4)

B. ELIGIBILITY

1. **North Coast Resource Partnership and North Coast IRWM Objectives**

   GOAL 1: INTRAREGIONAL COOPERATION & ADAPTIVE MANAGEMENT
   ☒ Objective 1 - Respect local autonomy and local knowledge in Plan and project development and implementation
   ☒ Objective 2 - Provide an ongoing framework for inclusive, efficient intraregional cooperation and effective, accountable NCIRWMP project implementation
   ☐ Objective 3 - Integrate Traditional Ecological Knowledge in collaboration with Tribes to incorporate these practices into North Coast Projects and Plans

   GOAL 2: ECONOMIC VITALITY

☒ Objective 4 - Ensure that economically disadvantaged communities are supported and that project implementation enhances the economic vitality of disadvantaged communities by improving built and natural infrastructure systems and promoting adequate housing
☒ Objective 5 - Conserve and improve the economic benefits of North Coast Region working landscapes and natural areas

GOAL 3: ECOSYSTEM CONSERVATION AND ENHANCEMENT
☒ Objective 6 – Conserve, enhance, and restore watersheds and aquatic ecosystems, including functions, habitats, and elements that support biological diversity
☒ Objective 7 - Enhance salmonid populations by conserving, enhancing, and restoring required habitats and watershed processes

GOAL 4: BENEFICIAL USES OF WATER
☒ Objective 8 - Ensure water supply reliability and quality for municipal, domestic, agricultural, Tribal, and recreational uses while minimizing impacts to sensitive resources
☒ Objective 9 - Improve drinking water quality and water related infrastructure to protect public health, with a focus on economically disadvantaged communities
☐ Objective 10 - Protect groundwater resources from over-drafting and contamination

GOAL 5: CLIMATE ADAPTATION & ENERGY INDEPENDENCE
☒ Objective 11 - Address climate change effects, impacts, vulnerabilities, and strategies for local and regional sectors to improve air and water quality and promote public health
☐ Objective 12 - Promote local energy independence, water/ energy use efficiency, GHG emission reduction, and jobs creation

GOAL 6: PUBLIC SAFETY
☐ Objective 13 - Improve flood protection and reduce flood risk in support of public safety

2. Does the project have a minimum 15-year useful life?
☒ yes ☐ no
If no, explain how it is consistent with Government Code 16727.

3. Other Eligibility Requirements and Documentation

CALIFORNIA GROUNDWATER MANAGEMENT SUSTAINABILITY COMPLIANCE
a) Does the project that directly affect groundwater levels or quality?
☐ yes ☒ no
b) If Yes, will the organization be able to provide compliance documentation outlined in the instructions, to include in the NCRP Regional Project Application should the project be selected as a Priority Project?
☐ yes ☐ no

CASGEM COMPLIANCE
a) Does the project overlie a medium or high groundwater basin as prioritized by DWR?
☐ yes ☒ no
b) If Yes, list the groundwater basin and CASGEM priority:
c) If Yes, please specify the name of the organization that is the designated monitoring entity:

d) If there is no monitoring entity, please indicate whether the project is wholly located in an economically disadvantaged community.
☒ yes ☐ no

URBAN WATER MANAGEMENT PLAN

a) Is the organization required to file an Urban Water Management Plan (UWMP)?
☐ yes ☒ no
b) If Yes, list the date the UWMP was approved by DWR:
c) Is the UWMP in compliance with AB 1420 requirements?
☐ yes ☐ no
d) Does the urban water supplier meet the water meter requirements of CWC 525?
☐ yes ☐ no
c) If Yes, will the organization be able to provide compliance documentation outlined in the instructions, to include in the NCRP Regional Project Application should the project be selected as a Priority Project?
☐ yes ☐ no

AGRICULTURAL WATER MANAGEMENT PLAN

a) Is the organization – or any organization that will receive funding from the project – required to file an Agricultural Water Management Plan (AWMP)?
☐ yes ☒ no
b) If Yes, list date the AWMP was approved by DWR:
c) Does the agricultural water supplier(s) meet the requirements in CWC Part 2.55 Division 6?
☐ yes ☐ no

SURFACE WATER DIVERSION REPORTS

a) Is the organization required to file surface water diversion reports per the requirements in CWC Part 5.1 Division 2?
☒ yes ☐ no
d) If Yes, will the organization be able to provide SWRCB verification documentation outlined in the instructions, to include in the NCRP Regional Project Application should the project be selected as a Priority Project?
☒ yes ☐ no

STORM WATER MANAGEMENT PLAN

a) Is the project a stormwater and/or dry weather runoff capture project?
☒ yes ☐ no
b) If yes, does the project benefit a Disadvantaged Community with a population of 20,000 or less?
☒ yes ☐ no
e) If No, will the organization be able to provide documentation that the project is included in a Stormwater Resource Plan that has been incorporated into the North Coast IRWM Plan, should the project be selected as a Priority Project?
☒ yes ☐ no

C. GENERAL PROJECT INFORMATION

1. Project Name: Storm Water Trash Capture Devices

2. Eligible Project Type under 2018/19 IRWM Grant Solicitation

- ☐ Water reuse and recycling for non-potable reuse and direct and indirect potable reuse
- ☐ Water-use efficiency and water conservation
- ☐ Local and regional surface and underground water storage, including groundwater aquifer cleanup or recharge projects
- ☐ Regional water conveyance facilities that improve integration of separate water systems
- ☒ Watershed protection, restoration, and management projects, including projects that reduce the risk of wildfire or improve water supply reliability
- ☒ Stormwater resource management projects to reduce, manage, treat, or capture rainwater or stormwater
- ☒ Stormwater resource management projects that provide multiple benefits such as water quality, water supply, flood control, or open space
- ☐ Decision support tools that evaluate the benefits and costs of multi-benefit stormwater projects
- ☒ Stormwater resource management projects to implement a stormwater resource plan
- ☐ Conjunctive use of surface and groundwater storage facilities
- ☐ Decision support tools to model regional water management strategies to account for climate change and other changes in regional demand and supply projections
- ☒ Improvement of water quality, including drinking water treatment and distribution, groundwater and aquifer remediation, matching water quality to water use, wastewater treatment, water pollution prevention, and management of urban and agricultural runoff
- ☐ Regional projects or programs as defined by the IRWM Planning Act (Water Code §10537)
- ☐ Other:

3. Project Abstract

The City is planning to install six (6) high-flow capacity (HFC) trash capture devices inside of existing City storm drain infrastructure in response to Water Code Section 13383 Order, issued by the State Water Board in 2017. The HFC devices will capture and prevent trash from traveling via the storm drains to receiving water bodies. Trash in local watersheds poses a serious threat to surface water quality and aquatic species if transported to local creeks, rivers, or the Pacific Ocean.

4. Project Description

Purpose: The City plans to capture and remove trash within in its MS4 boundary using strategically placed devices in the storm drain system.

Problem: Each year tons of plastics and other trash is transported to surface waters through MS4 discharges. Once conveyed, plastic trash persists for hundreds of years; poses a threat to wildlife through ingestion, entrapment, and harboring chemicals harmful to the aquatic environment and human health. Reducing the quantity of trash conveyed through MS4's is a crucial step to protecting the health of our waterways.

Setting/Background: The City of Fort Bragg is a designated Phase II MS4, regulated by the State Water Board. In 2017, all Phase II MS4's received Water Code Section 13383 Order, which establishes water quality standards for trash and requires MS4's to attain 100% capture of trash runoff using state certified devices by December 2030. The trash objectives are federally mandated by the Clean Water Act section 402.

Implementation: The locations were selected by identifying drainage patterns; inlets and outfalls where part of the conveyance system runs through a priority area; and running a cost analysis to find the most effective strategy. The City has determined that full capture can be achieved by installing 12 HFC devices. The first six devices will be installed as a pilot study, which will include a public outreach/education program and will report on the effectiveness of the outreach, devices, disposal, and maintenance.

Benefits: Certified HFC devices are designed to trap particles down to 5 mm, (1/4-inch), and the first six units will remove trash from a combined watershed of 500 acres. This project benefits the Virgin Creek-Frontal Pacific Ocean Watershed on the Mendocino Coast by reducing the impacts of trash on surface waters, reducing pollution in the waterways, improving habitats for aquatic species, preserving recreation opportunities, and long-term maintenance obligations may create new employment opportunities.

5. Specific Project Goals/Objectives

Goal 1: Regulatory: Meet 50% of Trash Capture Requirements by 2021
Goal 1 Objective: Install six of 12 HFC devices by 2021
Goal 1 Objective: Monitor performance of select devices
Goal 1 Objective: Install remaining six HFC devices between 2026-2029
Goal 1 Objective:

Goal 2: Environmental: Preserve the beneficial uses of water by eliminating trash pollution
Goal 2 Objective: Trash shall not be present in inland surface waters, enclosed bays, estuaries, and along shorelines or adjacent areas in amounts that adversely affect beneficial uses or cause nuisance
Goal 2 Objective: Reduction of trash pollution in waterways
Goal 2 Objective: Improve habitat for aquatic species by removing physical dangers of trash in waterways as well as removal of by-products released once trash degrades
Goal 2 Objective:

Goal 3: Community: Include the community in the project through Employment and Education
Goal 3 Objective: The trash capture installation project will employ +/- 20 consultants/contractors during design and construction, as well as two long term positions for operations and maintenance
Goal 3 Objective: Development of an outreach program to promote the importance of the reduction of trash loading on stormwater runoff and downstream impacts
Goal 3 Objective:

Additional Goals & Objectives (List)

6. Describe how the project addresses the North Coast Resource Partnership and North Coast IRWM Plan Goals and Objectives selected.

This project addresses the following NCRP/IRWM Goals (G) Objectives (O). G1-O1&O2 drainage plans were developed using the City's Storm Drain Master Plan. This project was first included in the Mendocino County SWRP and scored as priority #2. G2-O5 The project addresses nuisance trash to preserve tourism revenues and sustains 2 local jobs. G3-O6&O7 The project will restore 52 riparian acres and 8 wetland acres for a total ecosystem enhancement of 60 acres. The removal of the physical dangers of trash in the waterways and their harmful chemicals will improve the water quality for salmonid populations in the Noyo. G4-O8&O9 Removal of trash will reduce the likelihood of harmful chemicals released from trash negatively impacting water quality, thus ensuring quality for future uses and minimizing impacts to sensitive resources. G5-O11 Preventing trash from entering the watershed

will directly promote public health and address the effects of climate change through improved water quality.

7. **Describe the need for the project**.
   Trash has become an increasingly serious waste management and environmental problem in urbanized areas in the United States and around the world. According the US EPA over 250 million tons of trash was generated in the U.S. in 2012. Municipal recycling and composting programs have helped decrease the per capita generation rate; however each person still generates about 4 pounds of trash each day. While most of this trash is collected and properly disposed of, a large portion ends up in lakes, rivers, and eventually the ocean. By installing these first six HFC devices, the City will remove trash from a combined watershed of approximately 500 acres, preventing the transport of up to 5200 gallons of trash/year, or an equivalent of 10.5 gallons of trash/acre year to local surface water.

8. **List the impaired water bodies (303d listing) that the project benefits:**
   The Noyo River is listed on the USEPA 303d list for impairment from excess sedimentation, high water temperature, and non-point source pollution.

9. **Will this project mitigate an existing or potential Cease and Desist Order or other regulatory compliance enforcement action?** ☒ yes ☐ no
   If so, please describe?
   The City of Fort Bragg is a designated Phase II Municipal Separate Storm Sewer System (MS4), regulated by the California State Water Resources Control Board (SWRCB). As of 2017, in accordance with the SWRCB issued Water Code Order Section 13383, all Small MS4's are required to address the pervasive impacts trash has on waters of the state. The Trash Provisions Order requires capture of 100% of trash from priority land use areas.

10. **Describe the population served by this project.**
    This project will benefit the entire MS4 district population of 7,300. The City of Fort Bragg is considered a Severely Economically Disadvantaged Community (SDAC): A community with an annual household income that is less than 60% of the statewide median household income (MHI). The median household income for Fort Bragg is $36,389. 20% of Fort Bragg citizens live below Poverty Level. The community is ethnically diverse with a 30% Latino population & significant number of Native Americans.

11. **Does the project provide direct water-related benefits to a project area comprised of Disadvantaged Communities or Economically Distressed Communities?**
    - ☒ Entirely
    - ☐ Partially
    - ☐ No

    List the Disadvantaged Community(s) (DAC)
    City of Fort Bragg

12. **Does the project provide direct water-related benefits to a project area comprised of Severely Disadvantaged Communities (SDAC)?**
    - ☒ Entirely
    - ☐ Partially
    - ☐ No

List the Severely Disadvantaged Community(s)
City of Fort Bragg

13. **Does the project provide direct water-related benefits to a Tribe or Tribes**?
    - ☐ Entirely
    - ☐ Partially
    - ☒ No

    List the Tribal Community(s)

    If yes, please provide evidence of support from each Tribe listed as receiving these benefits.

14. **If the project provides benefits to a DAC, EDA or Tribe, explain the water-related need of the DAC, EDA or Tribe and how the project will address the described need.**
    This project address pollution, which has adverse impacts to water quality, recreation, and marine habitat. The economy of Fort Bragg (historically a logging town) now depends partly on being a "destination tourism" town. The hospitality industry in Fort Bragg employs approximately 20% of the total employable population over 16 according to 2012 data. The nuisance impacts of trash in waterways could degrade Fort Bragg's natural scenery and result in a decrease of tourist driven income and employment in the sector. In addition to tourism, two other prominent economic sectors of the community are fishing and recreation. The project will preserve habitat in the Noyo basin, the Virgin Creek-Frontal Pacific Ocean Watershed, and the storm drain systems that outfalls to the mill site wetland area. The enhancements made to the watershed and aquatic ecosystems by removing trash will inevitably provide direct benefits to important economic sectors of Fort Bragg.

15. **Does the project address and/or adapt to the effects of climate change? Does the project address the climate change vulnerabilities in the North Coast region?** ☒ yes ☐ no
    If yes, please explain.
    Fort Bragg is home to a thriving aquatic ecosystem; it is more effective to protect water from degradation than to restore it after contamination. Climate studies predict more frequent heavy storms, which mean more contaminants will runoff land into waterways and result in trash impairments. Wetlands and marine areas are critical for supporting biological diversity for climate resiliency. Protecting these ecosystems is critical in creating opportunities for biota to adapt in response to changes.

16. **Describe how the project contributes to regional water self-reliance.**
    Reclaimed water and desalination will be an important parts of the City's future water supply portfolio. Trash capture is an important first step in ensuring what comes out the MS4 is cleaned to a tertiary level. Trash capture devices are set for placement along the rivers, ocean and wetland outfalls. Of particular interest is the part of the City's storm drain system, once the main stem of Alder Creek, which is now an underground and drains to the mill pond. Approximately 30 percent of City stormwater from a 233-acre area (Basins C and D), is discharged into the log pond. The plants and associated microorganisms in the wetland act to filter sediments, uptake nutrients, and biodegrade carbonaceous material. The additional protections provided by trash capture prior to the wetland will further improve the treatment system of the wetland. As the City develops the mill site, the potential for alternate clean sources of water will be of utmost importance to future water self-reliance.

17. **Describe how the project benefits salmonids, other endangered/threatened species and sensitive habitats.**

The project provides trash capture to the Noyo River, GP wetland, and Glass Beach. The Noyo is listed as CCA and 303 (d) for water quality impairment from excess sedimentation, high water temperature, and non-point source pollution. Removing trash from the waterways will improve habitat conditions for the endangered species of Coho and Chinook salmon and steelhead trout in the Noyo by reducing pollutant discharges. The waterways surrounding Glass Beach discharge to a marine wildlife sanctuary.

18. **Describe local and/or political support for this project.**
This stormwater trash capture project is included in the 2018 Mendocino County SWRP where it ranked as priority 2 of 8. The SWRP is been incorporated into the North Coast IRWM Plan. Trash capture is Required by Federal Clean Water Act, the California Ocean Plan, and regulated by State Water Board. City Council provided direction on March 11, 2019 for City staff to use available funds from Local Street Sales Tax money as match funding for the project.

19. **List all collaborating partners and agencies and nature of collaboration.**
The City of Fort Bragg is an active participant in the North Coast Stormwater Coalition (NCSC). The NCSC goal is to reduce stormwater pollution and protect local waterways. NCSC coordinates public education, outreach, and implementation NPDES permits including regulations established by the Trash Order. City staff also participated in the TAC for the 2018 Mendocino County SWRP. The City's role included hosting public meetings, ranking benefits to meet watershed-specific needs, and evaluating projects. Other TAC representatives included Mendocino County Water Agency, MCRCD, MDOT, Environmental Health Division, Ridge to River, LACO, North Coast Regional Water Quality Control Board, SWRCB, and the Department of Fish and Wildlife.

20. **Is this project part or a phase of a larger project?** ☒ yes ☐ no
Are there similar efforts being made by other groups? ☒ yes ☐ no
If so, please describe?
In April of 2015, The Water Board adopted the Trash Amendments requiring all NPDES permittees statewide to comply with the water quality objectives prohibiting the conveyance of trash through MS4 discharges. In 2017, the City (along with all other small MS4's) received Water Code Section 13383 from the SWRCB, requiring 100% trash capture within 10 years. 12 devices are necessary to attain compliance; the City plans to install six devices during (phase I) in 2021 and phase II in 2026.

21. **Describe the kind of notification, outreach and collaboration that has been done with the County(ies) and/or Tribes within the proposed project impact area, including the source and receiving watersheds, if applicable.**
This project is included in the 2018 Mendocino County SWRP, which included a host public outreach. Notification, outreach, and collaboration included; a stakeholder advisory group, public idea submission, website and social media, and flyer distribution to stormwater list serves, community calendars, and hardcopy flyers posted to local advertising boards. The SWRP also included two public stakeholder meetings as well as engagement with other local resource partners to reach a larger audience.

22. **Describe how the project provides a benefit that meets at least one of the Statewide Priorities as defined in the 2018 IRWM Grant Program Guidelines and Tribal priorities as defined by the NCRP?**
Trash Capture meets the states program priority to "Protect and Restore Important Ecosystems." The 12 proposed trash capture devices are situated to capture 100% of trash pollution from the storm drain system. Existing habitat will be improved by the removal of the physical dangers of trash in waterways and wetlands, and removal of by-products that could be released through degradation of trash.

23. **Project Information Notes:**

D. PROJECT LOCATION

1. **Describe the location of the project**
   Geographical Information
   The project is located throughout the City of Fort Bragg on the Mendocino Coast. The 2.8 square mile City is divided into 10 sub-drainage basins, each served by a separate storm drain system. The 12 HFC units will be located in the drains prior to outfalls along the river basins (three at Noyo, one at Pudding Creek, two at Hare Creek); wetlands (four at SR1 prior to GP wetlands and Mill Pond); and the Pacific Ocean (two at Glass Beach). The first six HFC units include Noyo, GP, and Glass Beach.

2. **Site Address (if relevant):**
   This Project will install six (6) of twelve HFC units in these locations
   • Cypress Street between Sports Club and the Coast District Hospital - (one unit)
   • Minnesota Avenue, last manhole in the City Limits - (one unit)
   • Elm Street, just prior to the entrance of the North Coastal Trail - (two units)
   • Hazel Street, at the South Franklin Street intersection - (one unit)
   • West Alder Street, just east of the Mill Site - (one unit)
   • Chestnut St, just east of South Main Street - (alternate site)

3. **Does the applicant have legal access rights, easements, or other access capabilities to the property to implement the project?**
   ☒ Yes If yes, please describe
   ☐ No If No, please provide a clear and concise narrative with a schedule, to obtain necessary access.
   ☐ NA If NA, please describe why physical access to a property is not needed.

4. **Project Location Notes:**
   The City of Fort Bragg has strategically identifying key points along the storm drain system where end of line large capture devices will be installed to intercept and remove trash from the runoff stream. After a thorough cost analysis, City staff has determined that full capture (100%) can be achieved through the installation of 12 high-flow capacity devices at the selected locations throughout the City's MS4 area. The first six locations are listed above and the other six are identified in the map attachment.

E. PROJECT TASKS, BUDGET AND SCHEDULE

1. **Projected Project Start Date:** 4/1/20
   Anticipated Project End Date: 10/15/21

2. **Will CEQA be completed within 6 months of Final Award?**

☐ Yes State Clearinghouse Number:
☒ NA, Project is exempt from CEQA
☐ NA, Not a Project under CEQA
☐ NA, Project benefits entirely to DAC, EDA or Tribe, or is a Tribal local sponsor. [Projects providing a water-related benefit entirely to DACs, EDAs, or Tribes, or projects implemented by Tribes are exempt from this requirement].
☐ No

3. **Please complete the CEQA Information Table below**
   Indicate which CEQA steps are currently complete and for those that are not complete, provide the estimated date for completion.

CEQA STEP	COMPLETE? (y/n)	ESTIMATED DATE TO COMPLETE
Initial Study	N/A	
Notice & invitation to consult sent to Tribes per AB52	N/A	
Notice of Preparation	N/A	
Draft EIR/MND/ND	N/A	
Public Review	N/A	
Final EIR/MND/ND	N/A	
Adoption of Final EIR/MND/ND	N/A	
Notice of Determination	N/A	
N/A - not a CEQA Project	N/A	

If additional explanation or justification of the timeline is needed or why the project does not require CEQA, please describe.
This project is exempt from review under the California Environmental Quality Act pursuant to CEQA Guidelines Section 15301 as the repair, maintenance or minor alteration of an existing public facility involving negligible or no expansion of an existing use.

4. **Will all permits necessary to begin construction be acquired within 6 months of Final Award?**
   ☐ Yes
   ☒ NA, Project benefits entirely to DAC, EDA, Tribe, or is a Tribal local sponsor
   ☐ No

5. **PERMIT ACQUISITION PLAN**

Type of Permit	Permitting Agency	Date Acquired or Anticipated
N/A-Exempt from CDP		

For permits not acquired: describe actions taken to date and issues that may delay acquisition of permit.
No permits will be required for this capital maintenance project.

6. **Describe the financial need for the project**.
   Annual storm drain system operating costs are $200,000, including repairs, maintenance, and regulations established by NPDES. Storm drain operations are funded through the city's general fund. There are more than $6 million in unfunded CIP needed for the system repairs according to the 2004 Mater Plan. The City plans to pursue an enterprise fee for future projects; however there is much uncertainty among the Ca League of Cities regarding current/future litigation of Prop 218 and SB 231.

7. **Is the project budget scalable?** ☒ yes ☐ no
   Describe how a scaled budget would impact the overall project.
   This project can be scaled by reducing the scope of work and/or by the City paying a percentage of budgeted costs. If the project is not fully grant fundable, the City will commission the design to include all six devices and then bid the construction with fewer units, making remaining devices alternate bid items. Additionally, City Council has agreed to cover a percentage of unfunded costs and identified local street sales tax money as an allowable funding source.

8. **Describe the basis for the costs used to derive the project budget according to each budget category.**
   The costs in the project budget were derived using standard engineers estimating methods. Administrative costs were calculated using staff times and wage rates. The cost of materials were derived from the SWRCB Certified Devices list, with an average unit costing $26,000. Other components of construction costs were calculated using itemized bid summary totals from other recent prevailing wage projects.

9. **Provide a narrative on cost considerations including alternative project costs.**
   Three alternate project costs were considered prior to adopting this plan, which achieves the lowest long-term cost using the fewest number of devices while still meeting regulatory requirements. The other two methods considered for attaining compliance were to; 1) the place small catch basin inserts at every drain inlet within priority land use areas; or 2) design and implement a SWRCB approved plan using a combination of full capture systems, equivalency methods, and treatment controls.

10. **List the sources of non-state matching funds, amounts and indicate their status**.

    The City has designated resources to match up to 25% ($176,000) of the budgeted amount of the grant using available funds from Local Street Sales Tax money.

11. **List the sources and amount of state matching funds.**

    While neither this project nor the City of Fort Bragg were a direct recipient of state funding, the initial project was developed in accordance with the SWRP guidelines and included in the Final resource plan prepared by Mendocino County. The County of Mendocino was awarded $242,990 of Prop – 1 money for the implementation of the plan. The City of Fort Bragg participated as a member of the Technical Advisory Board under an MOU.

12. **Cost Share Waiver Requested (DAC or EDA)?** ☒ yes ☐ no

Cost Share Waiver Justification: Describe what percentage of the proposed project area encompasses a DAC/EDA, how the community meets the definition of a DAC/EDA, and the water-related need of the DAC/EDA that the project addresses. In order to receive a cost share waiver, the applicant must demonstrate that the project will provide benefits that address a water-related need of a DAC/EDA. The project is situated within the City of Fort Bragg; a 100% designated Severely Disadvantaged Community. This trash capture project addresses water-quality needs of the DAC by decreasing the adverse impacts of trash on waterways to ensure continued clean water and habitat restoration, propensity for recreation, fishing, boating, and sightseeing, as well as aiding with economic retention of jobs.

13. **Major Tasks, Schedule and Budget for NCRP 2018 IRWM Project Solicitation**
Please complete MS Excel table available at https://northcoastresourcepartnership.org/proposition-1-irwm-round-1-implementation-funding-solicitation/; see instructions for submitting the required excel document with the application materials.

14. **Project Tasks, Budget and Schedule Notes:**

F. PROJECT BENEFITS & JUSTIFICATION

1. **Does the proposed project provide physical benefits to multiple IRWM regions or funding area(s)?**
☒ yes ☐ no
If Yes, provide a description of the impacts to the various regions.
This project benefits the Virgin Creek-Frontal Pacific Ocean Watershed along the Mendocino Coast by reducing the impacts of trash on the beneficial uses of surface waters, reducing pollution in the waterways, improving habitats for aquatic species, and preserving recreational opportunities for locals and visitors to the region.

2. **Provide a narrative for project justification. Include any other information that supports the justification for this project, including how the project can achieve the claimed level of benefits. List any studies, plans, designs or engineering reports completed for the project.** *Please see the instructions for more information about submitting these documents with the final application.*
The water quality objectives established by the trash provisions are mandated by the federal Clean Water Act, Section 402. The provisions of the order require the City to select and implement one of two compliance methods to capture 100% of trash runoff from priority land use areas. MS4's selecting Track1 will install, operate, and maintain full capture systems (using either high flow capacity (HFC) devices, small catch basin inserts, or a combination of both) for their storm drain network to achieve the established trash mandates. MS4's selecting Track 2 will be required to achieve the same full capture results using a jurisdictionally designed monitoring program and a combination of controls of their choosing to obtain the same results. MS4's are required to meet the 100% trash capture requirement by December 2030.

   The City of Fort Bragg has chosen to implement Track 1 controls using the HFC units that can be installed at end of line manholes to capture all trash prior to the outfall into the receiving water. 12 total locations have been selected for the installation of trash capture devices to meet the state capture

requirements. Preliminary investigations at each site were completed to determine flow rates of selected nodes and the size of the existing underground infrastructure. This information was used to develop a cost estimate for the project. Two source documents for the preliminary analysis include the 2004 Storm Drain Master Plan (SDMP) and the SWRCB Certified Full Capture Systems list.

The SDMP divides the City into 10 drainage basins (A to J), each of which is served by a separate storm drain system. The drainage basins vary greatly between each other; they are detailed in the attached drainage basin table. The first project deliverable to the SWRCB was a jurisdictional map (attached). The jurisdictional map identifies the priority land use areas (of which there are 583 acres), corresponding storm drain networks and associated sub-watershed areas, and the proposed locations for certified full capture systems.

Through the implementation of the 12 proposed HFC devices in the City of Fort Bragg, we will capture up to 6000 gallons of trash each year. This will is the equivalent of 10.5 gal/acre year. All devices proposed for installation in this project are certified by the SWRCB and shall meet the full capture definition. Full Capture System is a treatment control, or series of treatment controls, including, a multi-benefit project or a low-impact development control that traps all particles that are 5 mm or greater, and has a design treatment capacity that is either: a) of not less than the peak flow rate, Q, resulting from a one-year, one-hour storm in the subdrainage area, or b) appropriately sized to, and designed to carry at least the same flows as, the corresponding storm drain.

Attachments:
Drainage Basins Table
Jurisdictional Map
2004 Storm Drain Master Plan (SDMP)
SWRCB Certified Full Capture Systems list
SWRP

3. **Does the project address a contaminant listed in AB 1249 (nitrate, arsenic, perchlorate, or hexavalent chromium)?** ☐ yes ☒ no
   If yes, provide a description of how the project helps address the contamination.

4. **Does the project provide safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes consistent with AB 685?** ☐ yes ☒ no
   If Yes, please describe.

5. **Does the project employ new or innovative technologies or practices, including decision support tools that support the integration of multiple jurisdictions, including, but not limited to, water supply, flood control, land use, and sanitation?** ☒ yes ☐ no
   If Yes, please describe.
   Certified full capture treatment controls are structural Best Management Practices installed inside of MS4 conveyance systems with the capability of removing trash down to 5mm from stormwater runoff flows up to the 1-year storm. These devices include continuous deflective separation, pipe screens,

netting trash traps, and other proprietary methods. The technology hit urban areas like Los Angeles and San Francisco in the early 2000's and is now readily available for uses in smaller MS4's.

6. **For each of the Potential Benefits that the project claims complete the following table to describe an estimate of the benefits expected to result from the proposed project.** [*See the NCRP Project Application Instructions, Potential Project Benefits Worksheet and background information to help complete the table. The NCRP Project Application, Attachment B includes additional guidance, source materials and examples from North Coast projects*.]

PROJECT BENEFITS TABLE

Potential Benefits Description	Physical Amt of Benefit	Physical Units	Est. Economic Value per year	Economic Units
Water Supply				
Water Quality				
Contaminant Reduction	5,200	gal trash/yr		Trash reductio n
Additional Water Quality Projects Avoided	$1,000,000	alternate project	$100,000	Mainten ance cost
Enhancement of Beneficial Uses	+/-3	downstream waterways		
Other Ecosystem Service Benefits				
Habitat Restoration	60	riparian/wetl and ac	$22,000	Annual benefit
Increased Quality of Recreation or Public Access	+/-90	recreation days/year	$21,000	Annual benefit
Other Benefits				
Education Benefits	829	students		Student educatio n
Technology Benefits	>5	mm		Particles captured

Potential Benefits Description	Physical Amt of Benefit	Physical Units	Est. Economic Value per year	Economic Units
Jobs Created and/or Maintained	+<2	jobs		Employed citizens

7. Project Justification & Technical Basis Notes:

1. Contaminant reduction; based on Bay Area Stormwater Management Agencies Association (BASMA), the average annual gallons of trash generated per acre/year is 10.48, this number was applied to the 500 acres of watershed from which trash will be captured, to determine that approximately 5200 gals of trash/year will be bypassed from entering the local waterways.

2. Additional Water Quality Projects Avoided; the trash standards are mandatory, so this factor was calculated assuming the City had utilized an alternate method to attain the same trash capture benefit. The alternate method would have been to install 149 smaller catch basin inserts with an average cost of $1250.00/device and an annual maintenance cost of $500/device, annual cost was calculated using a ten-year monitoring time frame.

3. Enhancement of Beneficial uses; there are +/-3 rivers directly enhanced by implementation of the trash capture project, only Noyo directly benefits with the first six HCF devices installed.

4. Habitat Restoration; the City's GIS was used to draw buffers encompassing the riparian areas directly alongside the three rivers and the two wetlands directly improved by the removal of physical dangers of trash in waterways and trash by-products released through degradation. Only the Noyo River (52 acres at $120/acre) was included as in the riparian calculation (as the other two waterways are not set for capture device installation until round 2) and two wetlands (8 acres at $2,000/acre) for a total of 60 acres benefited by this round of the project.

5. Increased Quantity or Quality of Recreation of Public Access; an estimated 90 good weather days/year were estimated for fishing and boating and 150 days for the duration of the whale watching season was used for wildlife viewing benefit.

6. Education Benefit; the education component of the project is the development of an outreach program to promote trash reduction in stormwater runoff. The program will include outreach to youth at two local elementary schools with a total student body of 829 students. Outreach will include 2 visits/field trips per year. Additional public outreach which includes tabling at Farmers Market and participation in Earth Day events, and annual Coastal Beach Clean-up Days, which will reach additional members of the public at large.

7. Technology; in accordance with the Trash Amendments, all trash treatment control devices (Devices) installed after December 2, 2015 shall meet the Full Capture System requirements and

be certified by the SWRCB Executive Director, or designee, prior to installation. In order for a devices to meet the Full Capture System definition they must:

- Be appropriately sized to treat not less than the peak flowrate resulting from a 1-year, 1-hour storm event (design storm) or at least the same peak flows from the corresponding storm drain;
- Not bypass trash below the design storm under maximum operational loading conditions;
- Trap all particles that are 5 mm or greater up to the design flow or at least the same peak flows from the corresponding storm drain; and
- Not have a diversion structure present upstream such that a portion of the peak flow is not treated to trap all particles 5 mm or greater.

8. Jobs Created and Maintained: Municipalities are required to incorporate an Operation and Maintenance Plan sufficient to ensure that captured trash does not migrate back into the storm sewer system. HFC Device maintenance will be conducted twice a year, before the spring and fall rains, and additionally as necessary. Typical HFC devices are maintained using a large vacuum truck for which special training and licensing is necessary.

Major Tasks, Schedule and Budget for North Coast Resource Partnership 2018/19 IRWM Project Solicitation

Project Name: Storm Water Trash Capture Devices
Organization Name: City of Fort Bragg

Task #	Major Tasks	Task Description	Major Deliverables	Current Stage of Completion	IRWM Task Budget	Non-State Match	Total Task Budget	Start Date	Completion Date
A	**Category (a): Direct Project Administration**								
1	Administration	In cooperation with the County of Humboldt sign a sub-grantee agreement for work to be completed on this project. Develop invoices with support documentation. Provide audited financial statements and other deliverables as required	Invoices, audited financial statements and other deliverables as required	0%	$0.00	$5,000.00	$5,000.00	3/1/20	10/15/21
2	Monitoring Plan	Develop Monitoring Plan to include goals and measurable objectives	Final Monitoring Plan	0%	$0.00	$3,000.00	$3,000.00	3/1/20	10/15/21
3	Labor Compliance Program	Execute service agreement with Labor Compliance Program company	Submission of Labor Compliance Program	100%	$0.00	$0.00	$0.00	3/1/20	10/15/21
4	Reporting	Develop monthly reports describing work completed, challenges, and strategies for reaching remaining project objectives. Develop Final Report	Quarterly and Final Reports	0%	$0.00	$3,000.00	$3,000.00	3/1/20	3/1/22
B	**Category (b): Land Purchase/Easement**								
1	N/A			0%	$0.00	$0.00	$0.00		
C	**Category (c): Planning/Design/Engineering/Environmental Documentation**								
1	Final Design /Plans	Define Scope of Work, Prepare RFP, hire designer, and develop final construction plans and specifications	Bid ready Construction Plans and Specs	0%	$54,000.00	$0.00	$54,000.00	3/1/20	8/1/20
2	Environmental Documentation: CEQA *	This project is exempt from review under the California Environmental Quality Act pursuant to CEQA Guidelines Section 15301 as the repair, maintenance or minor alteration of an existing public facility involving negligible or no expansion of an existing use.	NOE	80%	$0.00	$1,000.00	$1,000.00	1/1/19	3/1/20
3	Permit Development *: [PLEASE COMPLETE]			0%	$0.00	$0.00	$0.00		
4	Permit Development *: [PLEASE COMPLETE]						$0.00		
5	Permit Development *: [PLEASE COMPLETE]			0%	$0.00	$0.00	$0.00		
6				0%	$0.00	$0.00	$0.00		
7				0%	$0.00	$0.00	$0.00		
8				0%	$0.00	$0.00	$0.00		
D	**Category (d): Construction/Implementation**								
1	Construction/Implementation Contracting	Advertise for bids; conduct pre-bid meeting; evaluate bids; award contract (City Council Approval required); Pre-Construction meeting and coordination	Summary of Bids, Resolution Awarding Bid, and Notice to Proceed	0%	$0.00	$2,500.00	$2,500.00	3/1/21	5/1/21
2	Mobilization and Site Preparation	Prepare Site and mobilize project; project site preparation; Order project equipment and supplies; Assure project permits are in place; Conduct pre-project site photo-monitoring	Summary of site preparation activities in first quarterly report; pre-project site photos; secure WDID from State Water Board for CGP; HFC Devices on-site	0%	$80,000.00	$150,000.00	$230,000.00	5/1/21	5/31/21
3	Project Construction/Implementation: Traffic Control, Erosion and Stormwater Control, Utility Force Coordination	Install and maintain; stormwater controls, establish traffic controls, coordinate utility relocations with maintenance forces	Site Inspection log, summary report of activities, and site photos	0%	$80,000.00	$0.00	$80,000.00	5/15/21	8/31/21
4	Project Construction/Implementation: Excavation, Hauling, and Installation	Excavation, hauling, and primary critical path project item completion; including potholing, utility locations, utility protection, removal of obstructions, excavation, material testing, disposal of excavated material, furnish and install trash capture device, backfill, compact, and restore surface	Summary report of construction activities, site photos, and construction completion	0%	$160,000.00	$0.00	$160,000.00	5/15/21	8/31/21
5	Contingency	Contingency	Contingency	0%	$65,000.00	$0.00	$65,000.00	7/1/21	8/31/21
6				0%	$0.00	$0.00	$0.00		
7	Project Signage	Install Prop 1 Signage	Signage Installed	0%	$0.00	$500.00	$500.00	8/15/21	8/31/21

Project Name: Storm Water Trash Capture Devices
Organization Name: City of Fort Bragg

Task #	Major Tasks	Task Description	Major Deliverables	Current Stage of Completion	IRWM Task Budget	Non-State Match	Total Task Budget	Start Date	Completion Date
8	Project Close Out, Inspection & Demobilization	Inspect project components and establish that work is complete. Verify that all project components have been installed and are functioning as specified will be conducted as part of construction inspection and project closeout. Conduct project completion photo monitoring. Prepare record drawings.	As-Built and Record Drawings; Site inspections, Project completion site photos	0%	$0.00	$5,000.00	$5,000.00	8/15/21	8/31/21
9	Project Performance Monitoring	The performance of the project will be monitored in accordance to the Monitoring Plan using the following measurement tools and methods: hydraulic analysis to confirm no adverse impacts upstream, qualitatively describe device functionality, and quantify trash collected by devices	Quarterly reporting, final project report, and Final post project effectiveness report	0%	$10,000.00	$6,000.00	$16,000.00	7/1/20	3/1/22
10	Construction Administration/Management	Complete tasks necessary to administer construction contract. Keep daily records of construction activities, inspection, and progress. Conduct project construction photo-monitoring.	Construction Management Logs; Completed construction administration tasks documented in monthly progress reports	0%	$80,000.00	$0.00	$80,000.00	5/1/21	10/15/21
	Total North Coast Resource Partnership 2018/19 IRWM Grant Request				**$529,000.00**	**$176,000.00**	**$705,000.00**		
	Is Requested Budget scalable by 25%? If yes, indicate scaled totals; if no delete budget amount provided.				**$396,750.00**	**$132,000.00**	**$528,750.00**		
	Is Requested Budget scalable by 50%? If yes, indicate scaled totals; if no delete budget amount provided.				**$264,500.00**	**$88,000.00**	**$352,500.00**		

Pacific Ocean

These are developed priority land use lots that have no built infastructure to connect with the City's storm drain network.

Basin H

Hare Crk

Highway 1 (CalTrans Jurisdiction)

Pudding Crk

Basin G

Basin C

Basin A

Basin D

Basin E

Basin J

Basin B

Noyo Riv

Basin I

Basin F

City Limit
Highway 1 (CalTrans Jurisdiction)
Transit Stops
High Density
Commercial
Industrial
Stormwater Basins
Stormdrain Network
Stormdrain Man Holes
Drain Inlets

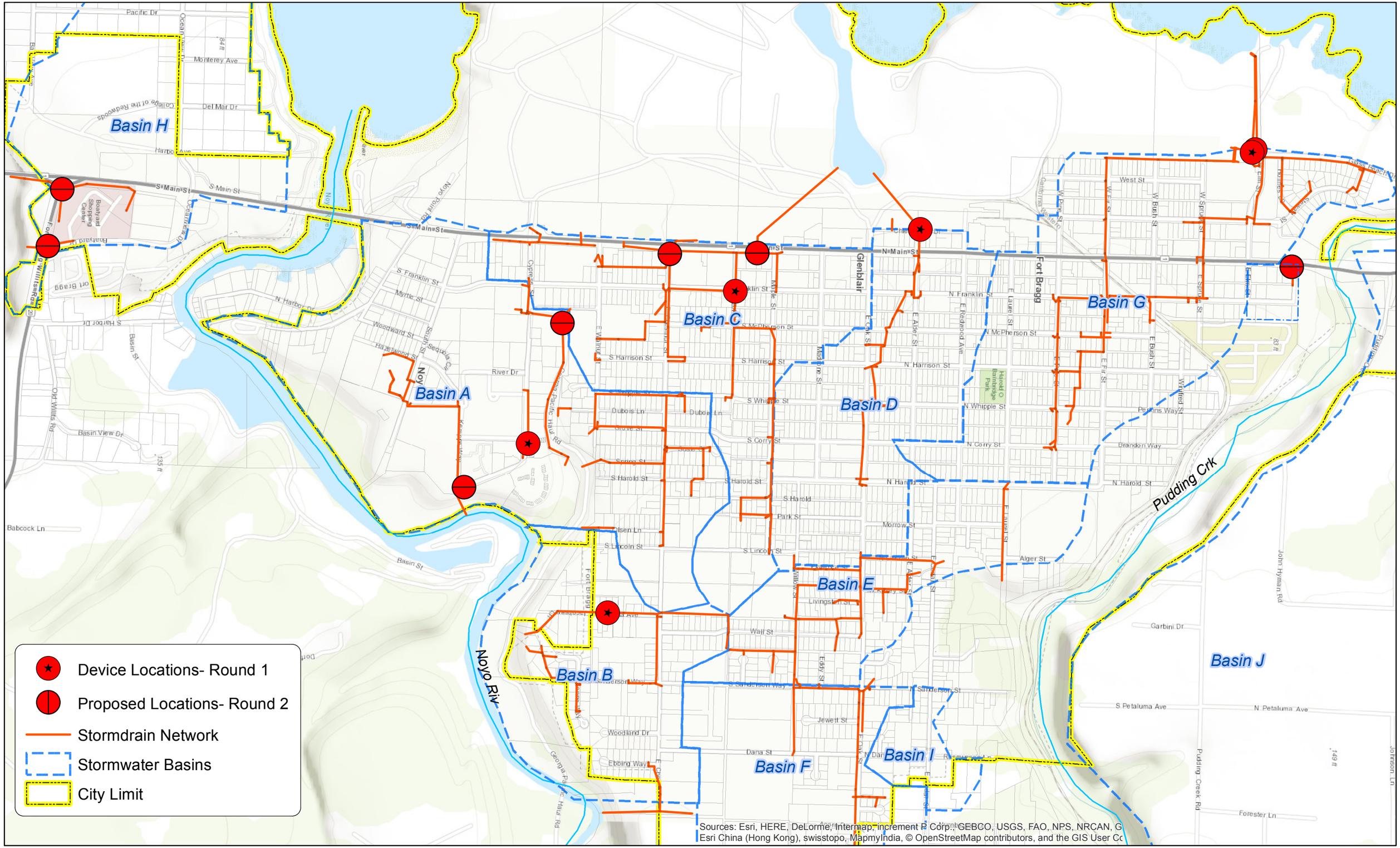
Feet
0 400 800 1,200

N

Trash Provisions Jurisdictional Map

City of Fort Bragg, 2017

Feature and boundary locations depicted are approximate only. 08/31/2017
Z:\Public Works\Storm Water\gov\2016-17 deliverables\Jurisdictional Map.mxd



N

0 Feet 500

Round 1

Proposed High-Flow Capture Device Locations

Feature and boundary locations depicted are approximate only. 02/26/2019

Drainage Basins Table

Ten drainage basins with respective drainage areas (acres), priority land uses, and descriptions of runoff and the applicability of installing trash capture devices

Drainage Basin	Drainage Area (acres)	Priority Land Use[1]	Description
A	205	C, R	Runoff generally flows toward a logging road, into an open natural channel, and ends up in the Noyo River. **Three** locations have been identified for placement of trash capture devices.
B	100	R	Runoff generally flows toward the Noyo River directly down steep slopes. **One** location has been identified for placement of a trash capture device.
C	130	R, C	Runoff moves across Main Street to the Georgia-Pacific log pond[2]. **Three** locations have been identified for placement of trash capture devices.
D	104		Runoff is carried in a single pipeline down the center of the drainage area (aka Alder Creek). Cross drains prevent standing water at intersections by conveying gutter flow downstream. **One** location has been identified for placement of a trash capture device.
E	76	--	Runoff drains toward an old duck pond near Alder, discharges to an open channel in Johnson Park, and then flows into Pudding Creek. No locations are identified for the installation of trash capture devices.
F	144	R	Runoff is directed toward Pudding Creek. No locations are identified for the installation of trash capture devices.
G	174	R, C, I	Runoff meets from two main branches of the existing drainage system at Glass Beach, which then discharges into the Pacific Ocean. **Three** locations have been identified for placement of trash capture devices.
H	142	R, C	The existing drainage system is primarily Caltrans and private lines, so the applicability of the state mandate is currently undetermined. **One** location has been identified for placement of a trash capture device.
I	17	R	No locations are identified for the installation of trash capture devices.
J	983	R, C, I, rural	A majority of drainage area is outside of city limits, but the runoff is all directed toward the city storm drain system. The existing system consists of ditches and culverts with no built infrastructure to support installation of trash capture devices. No locations are identified for the installation of trash capture devices.

[1] C - commercial, R - residential, I - industrial

[2] The Georgia Pacific log pond is approximately 8-10 acres, with 30 percent of the City's stormwater, from a 233-acre area (Basins C and D), discharged into the pond on its path to the Pacific Ocean. The log pond has become a wetland of its own accord, containing several aquatic plant species and potentially providing treatment to the stormwater before its end destination.

Certified Full Capture System List of Trash Treatment Control Devices

In accordance with the Trash Amendments,[1] all trash treatment control devices (Devices) installed after December 2, 2015 shall meet the Full Capture System definition[2] and be certified by the State Water Resources Control Board (State Water Board) Executive Director, or designee, prior to installation. The Devices listed below meet the Full Capture System definition and are certified for installation by the State Water Board Executive Director designee, provided that upon installation, the Devices:

1) Are appropriately sized to treat not less than the peak flowrate resulting from a 1-year, 1-hour storm event (design storm) or at least the same peak flows from the corresponding storm drain;
2) Do not bypass trash below the design storm under maximum operational loading conditions;
3) Trap all particles that are 5 mm or greater up to the design flow[3] or at least the same peak flows from the corresponding storm drain; and
4) Do not have a diversion structure present upstream such that a portion of the peak flow is not treated to trap all particles 5 mm or greater.

Municipalities shall incorporate an operation and maintenance plan sufficient to ensure that the captured trash does *not* migrate into the storm sewer system.

The Executive Director reserves the right to de-certify and remove any Device from this list. Listing of any Device does not constitute an endorsement by the State Water Board. Applicants seeking to add a new Device to this list shall submit an application to the Executive Director Designee for approval. The Trash Treatment Control Device Application Requirements are located on the Trash Amendments Implementation webpage at:

https://www.waterboards.ca.gov/ water_issues/programs/stormwater/trash_implementation.shtml.

[1] Amendment to the Water Quality Control Plan for Ocean Waters of California to Control Trash (Ocean Plan) and Part 1 Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, And Estuaries of California (ISWEBE Plan) adopted by the State Water Board.

[2] Full Capture System is a treatment control, or series of treatment controls, including but not limited to, a multi-benefit project or a low-impact development control that traps all particles that are 5 mm or greater, and has a design treatment capacity that is either: a) of not less than the peak flow rate, Q, resulting from a one-year, one-hour storm in the subdrainage area, or b) appropriately sized to, and designed to carry at least the same flows as, the corresponding storm drain.

[3] The region specific one-year, one-hour storm (or design flow) may be obtained from the National Oceanic and Atmospheric Precipitation Estimates at https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html

CATCH BASIN INSERTS and Other DEVICES

According to the **California Health and Safety Code**, Landowners in California are legally responsible to abate (eliminate the source of) a public nuisance arising from their property, including mosquitoes. Mosquito vector control agencies have substantial authority to access public and private property, inspect known or suspected sources of mosquitoes, and abate the source of a mosquito problem, and charge the landowner for work performed and/or charge fees if a landowner is unwilling or unable to address a mosquito problem arising from their property. [H&S Code Sections 2001 - 4(d); 2002; 2060 (b)] and [H&S Code sections 2060-2067, 100170, and 100175].

Depending on the Device, certain Devices may create a habitat for mosquitos; moreover, impede the pest control operator's ability to both visually inspect the Device for mosquito breeding and apply the appropriate chemical treatment. The State Water Board is providing vector control accessibility information below. Please contact the **Mosquito Vector Control Association of California Review Team** (MVCAC <Trashtreatment@mvcac.org>) or the **local mosquito vector control agency** prior to selection of any of the following **Devices** to ensure inspection and treatment is not impeded, and to minimize the potential of nuisances and public health impacts resulting from vector breeding.

Manufacture/ Website	Device Name	Fact Sheet	Vector Control Accessibility			Municipality Contacts Experienced with Device
			Inspection	Treatment	Verification Letter	
Advanced Drainage Systems, Inc. - FLEXSTORM Division http://www.inletfilters.com/	**FLEXSTORM Full Trash Capture (FTC) Inserts**	**APPLICATION 2**				Refer to Application
	FLEXSTORM Connector Pipe Screen	**ADS-1**				No Contacts
Bio Clean® Environmental Services, Inc. http://www.biocleanenvironmental.com/products/	**Catchbasin Connector Pipe Trash Screen (Trash Guard)**	**BC-4**				No Contacts
	Curb Inlet and Grate Inlet Filters	**APPLICATION 4**				Refer to Application
	Modular Connector Pipe Trash Screen	**BC-3**				No Contacts
CleanWay® Environmental Partners, Inc. http://Cleanwayusa.com	**CleanWay Curb Inlet Filtration System**	**APPLICATION 7**				Refer to Application
	CleanWay 'Drop inlet Filtration Insert	**APPLICATION 8**				Refer to Application
Coanda Inc. http://www.coanda.com/	**Coanda Trash Screen and Debris Fence**	**COA-1**				No Contacts
Ecology Control Industries http://www.ecologycontrol.com	**Debris Dam - Connector Pipe Trash Screen**	**ECI**				No Contacts
Filtrexx Sustainable Technologies https://www.filtrexx.com/en/products/stormexx	**StormExx® Clean**	**APPLICATION 16**				Refer to Application

CATCH BASIN INSERTS and Other DEVICES

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Manufacture/ Website	Device Name	Fact Sheet	Vector Control Accessibility			Municipality Contacts Experienced with Device
			Inspection	Treatment	Verification Letter	
G2 Construction, Inc. http://www.g2construction.com/products/	**Collector Pipe Trash Screen & Removable Collector Pipe Trash Screen**	**G2-1 G2-1R**				No Contacts
Hydro International® https://www.hydro-int.com/en/products/flo-filter	**Hydro Up-Flo Filter®**	**APPLICATION 11**				Refer to Application
Inventive Resources, Inc. http://www.IRIproducts.com	**Water Decontaminator**	**APPLICATION 3**				Refer to Application
Oldcastle Precast® Stormwater Solutions https://oldcastleprecast.com/stormwater/ **(formerly KriStar Enterprises Inc.)**	**Flo Guard +Plus Catchbasin Trash Screen Insert, Combination Inlet Style - Drop in Basket**	**KS-1**				Locations and Contacts
	Flo Guard Catchbasin Trash Screen Insert, Flat Grated Inlet Style-Drop in Basket	**KS-2**				Locations and Contacts
	Flo Guard Catchbasin Outlet Trash Screen Insert - Connector Pipe Screen	**KS-3**				Locations and Contacts
Revel Environmental Manufacturing, Inc. http://www.remfilters.com	**Triton™ Bioflex Inlet Trash Guard – Catchbasin Polyester Fiber Mesh Trash Filter Insert**	**REM-1**				Locations and Contacts
	Triton™ CPS-FTC (Crescent Pipe Screen)	**APPLICATION 12**				Refer to Application
	Triton Perf-FTC Insert	**APPLICATION 13**				Refer to Application

CATCH BASIN INSERTS and Other DEVICES

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Depending on the Device, certain Devices may create a habitat for mosquitos; moreover, impede the pest control operator's ability to both visually inspect the Device for mosquito breeding and apply the appropriate chemical treatment. The State Water Board is providing vector control accessibility information below. Please contact the **Mosquito Vector Control Association of California Review Team** (MVCAC <Trashtreatment@mvcac.org>) or the **local mosquito vector control agency** prior to selection of any of the following **Devices** to ensure inspection and treatment is not impeded, and to minimize the potential of nuisances and public health impacts resulting from vector breeding.

Manufacture/ Website	Device Name	Fact Sheet	Vector Control Accessibility			Municipality Contacts Experienced with Device
			Inspection	Treatment	Verification Letter	
Stormtek (formerly Advanced Solutions) http://www.stormtekcps.com	**Stormtek ST3 & ST3G – Catchbasin Connector Pipe**	**AS-1, AS-2**				Locations and Contacts
United Stormwater, Inc. http://www.unitedstormwater.com	**Connector Pipe Trash Screen**	**USW-1**				Locations and Contacts
	Drop-in-Grate Inlet - Catchbasin Trash Screen	**USW-5**				Locations and Contacts

High Flow Capacity Trash Devices

According to the **California Health and Safety Code**, Landowners in California are legally responsible to abate (eliminate the source of) a public nuisance arising from their property, including mosquitoes. Mosquito vector control agencies have substantial authority to access public and private property, inspect known or suspected sources of mosquitoes, and abate the source of a mosquito problem, and charge the landowner for work performed and/or charge fees if a landowner is unwilling or unable to address a mosquito problem arising from their property. [H&S Code Sections 2001 - 4(d); 2002; 2060 (b)] and [H&S Code sections 2060-2067, 100170, and 100175].

Depending on the Device, certain Devices may create a habitat for mosquitos; moreover, impede the pest control operator's ability to both visually inspect the Device for mosquito breeding and apply the appropriate chemical treatment. The State Water Board is providing vector control accessibility information below. Please contact the **Mosquito Vector Control Association of California Review Team** (MVCAC <Trashtreatment@mvcac.org>) or the **local mosquito vector control agency** prior to selection of any of the following **Devices** to ensure inspection and treatment is not impeded, and to minimize the potential of nuisances and public health impacts resulting from vector breeding.

Manufacture/ Website	Device Name	Fact Sheet	Vector Control Accessibility			Municipalities Contacts Experienced with Device
			Inspection	Treatment	Verification Letter	
AquaShield,™ Inc. http://www.aquashieldinc.com/--aqua-swirl.html	**Aqua-Swirl® Stormwater Treatment System**	**APPLICATION 1**				Refer to Application
Bio Clean® Environmental Services, Inc. http://www.biocleanenvironmental.com/products/	**Debris Separating Baffle Box (DSBB)**	**APPLICATION 6**				Refer to Application
	Modular Wetland System® (MWS)	**APPLICATION 15**				Refer to Application
Contech® Construction Products http://www.conteches.com/products/stormwater-management/treatment/cds	**Continuous Deflective Separator (CDS) – Hydrodynamic Separator**	**CCP-1HF**				Locations and Contacts
Jensen® Stormwater Systems http://www.jensenengineeredsystems.com/ about/stormwater/	**Jensen® Deflective Separators (JDS)**	**APPLICATION 5**				Refer to Application
Hydro International® (Stormwater) www.hydro-int.com	**Downstream Defender (In-Line & Off-Line Configurations)**	**APPLICATION 14**				Refer to Application
	Hydro DryScreen®	**APPLICATION 10**				Refer to Application

High Flow Capacity Trash Devices

According to the **California Health and Safety Code**, Landowners in California are legally responsible to abate (eliminate the source of) a public nuisance arising from their property, including mosquitoes. Mosquito vector control agencies have substantial authority to access public and private property, inspect known or suspected sources of mosquitoes, and abate the source of a mosquito problem, and charge the landowner for work performed and/or charge fees if a landowner is unwilling or unable to address a mosquito problem arising from their property. [H&S Code Sections 2001 - 4(d); 2002; 2060 (b)] and [H&S Code sections 2060-2067, 100170, and 100175].

Depending on the Device, certain Devices may create a habitat for mosquitos; moreover, impede the pest control operator's ability to both visually inspect the Device for mosquito breeding and apply the appropriate chemical treatment. The State Water Board is providing vector control accessibility information below. Please contact the **Mosquito Vector Control Association of California Review Team** (MVCAC <Trashtreatment@mvcac.org>) or the **local mosquito vector control agency** prior to selection of any of the following **Devices** to ensure inspection and treatment is not impeded, and to minimize the potential of nuisances and public health impacts resulting from vector breeding.

Manufacture/ Website	Device Name	Fact Sheet	Vector Control Accessibility			Municipalities Contacts Experienced with Device
			Inspection	Treatment	Verification Letter	
Oldcastle Precast® Stormwater Solutions www.oldcastlestormwater.com **(formerly KriStar Enterprises Inc.** http://www.kristar.com**)**	**Dual Vortex Separator – Hydrodynamic Separator with Trash Screen**	**KS-7HF**				Locations and Contacts
	FloGard Perk Filter – Radial Cartridge Filter with Trash Screen	**KS-8HF**				No Contacts
	Nettech Gross Pollutant Trap, In Line – Trash Screen and Net	**KS-10HF**				No Contacts
	***Nettech Gross Pollutant Trap, End of Line – Trash Screen and Net**	**KS-11HF**				No Contacts
Roscoe Moss Company https://roscoemoss.com/products/gross-solids-removal%20device/	**Storm Flo® Trash Screen – Linear Radial Gross Solids Removal Device**	**RMC-1HF**				Locations and Contacts
StormTrap® Modular Concrete Stormwater Management http://stormtrap.com	**Inline Netting Trash Trap – Inline Pipe Net with Trash Screen** (formerly Fresh Creek Technology Product**)**	**FCT-IHF**				No Contacts
	***End of Pipe Netting Trash Trap – End of Pipe Net with Trash Screen** (formerly Fresh Creek Technology Product**)**	**FCT-2HF**				Locations and Contacts
	SiteSaver®	**APPLICATION 9**				Refer to Application
Suntree Technologies Inc.® www.suntreetech.com	**Nutrient Separating Baffle Box®**	**APPLICATION 17**				Refer to Application

***** Nets and any associated containment structures are often placed at the outlets of storm drain pipes, which can be in receiving waters such as rivers, creeks, and wetlands. Under these circumstances, a Clean Water Act Section 404 permit may be required from the Army Corps of Engineers, a Clean Water Act Section 401 water quality certification may be required by the Regional Water Board, and a Section 1600 Streambed Alteration Agreement may be required by the CA Dept. of Fish and Wildlife. Before installing a net within a receiving water, municipalities are instructed to submit the design to the Regional Water Board for review and further instruction.