San Juan County
Voluntary Stewardship Program
Adaptive Management Plan

by San Juan Islands Conservation District,
on behalf of the San Juan County VSP Work Group

Approved December 18, 2020

Introduction

The purpose of this Adaptive Management Plan is to document changes that the San Juan County Voluntary Stewardship Program (VSP) Work Group has deemed necessary to better meet the protection and enhancement goals and benchmarks of the Work Plan. Additionally, as a result of the five-year VSP reporting process, we concluded that a number of items in the Work Plan were in need of clarification. For example, in a few cases, goals were not designed to protect or enhance critical areas. In many cases, there was not a clear progression from performance metric, to benchmark, to goal. This adaptive management plan is our first attempt to both clarify the original intent of the goals, benchmarks, and metrics, as well as to institute changes that we hope will further the goals of protecting and enhancing critical areas on farmland while maintaining agricultural viability in San Juan County.

Adaptive Management Changes

Proposed changes in the form of adaptive management are presented in Table 1. The following logic was used in determining whether to propose adaptive management for areas that are unclear in the Work Plan:

1. Does the goal aim to protect or enhance critical areas? If not, revisions or deletions were made. For example, a goal to "Minimize flood damage to agricultural properties and operations" does not protect or enhance Frequently Flooded Areas (FFAs). (See Goal 15)

2. Does the benchmark help to measure achievement of the goal? If not, revisions were made. For example, the benchmark "Acreage of FFAs where they intersect with ag activity" gives us no indication of whether or how well we are protecting or enhancing FFAs. (See Goal 17)

3. Are there benchmarks to measure the *effectiveness* of critical areas protection and enhancement actions? If not, they were added. In most cases, there were only benchmarks that measure *implementation.* This is true for wetlands, fish and wildlife habitat conservation areas (FWHCAs), geologically hazardous areas (GHAs), and two of the three critical aquifer recharge areas (CARA).

4. Do the metrics correspond to the benchmark? If not, revisions were made. For example, although "Change in SVAP2 element scores" is a meaningful metric, it does not inform the benchmark, "ID actions taken to enhance streams." (See Goal 5)

In addition to providing clarification on unclear benchmarks and metrics, we also identified areas in which goals or benchmarks were not met and have provided adaptive management changes that will help in their achievement. Generally, in these cases, we plan to increase outreach to farm operators, with the goal being to develop an Individual Stewardship Plan, implement best management practices, and ultimately see protection and/or enhancement of critical areas on farmland. We also plan to focus outreach in geographic areas that are known to have concerns that affect critical areas, such as issues with livestock and water quality. All of these changes are described in Table 1.

This adaptive management plan replaces Table 13 in the San Juan County VSP Work Plan, as well as individual goals, benchmarks, and metrics found in Chapter 5 of the Work Plan (specific page numbers can be found under each goal in Table 1 of this document). The Work Plan can be accessed at: https://sccwagov.app.box.com/s/z4xzvoo5c54dz3hnkb3ixxc79rwsx7iu

Table 1: Original Goals, Benchmarks, & Metrics with Adaptive Management Changes

Work Plan Table 13: Goal (with Work Plan page number)	**Work Plan Table 13: Benchmark**	**Work Plan Table 13: Performance Metrics and Indicators**	**Benchmark Adaptive Management**	**Goal Adaptive Management**	**Benchmark Monitoring**
WETLANDS Goal 1: Protect wetland functions related to water quality, water quantity, and habitat (page 63)	Identify actions taken to protect existing wetlands (e.g. fencing)	1. Number of acres of wetland protected by ISP actions. 2. Acres of wetlands in ISPs rolled up to County GIS wetland acreage layer	To be consistent with the narrative in the work plan, as well as to comply with the definition of protection (no loss in acreage or measurable degradation of the resource) we added a benchmark for wetland acreage. The original benchmark will be used, its metric is further clarified to include the Access Control (472) BMP, and additional metrics are added to include the Fence (382) BMP and to track BMPs still in operation. **Benchmark 1:** Actions taken to protect existing wetlands **Metric a:** Number of wetland acres protected by Access Control (472) BMP **Metric b:** Linear feet of Fence (382) installed to protect wetlands **Metric c:** Percent of implemented BMPs still in operation **Benchmark 2:** Maintain baseline (2011) wetland acreage within agricultural areas **Metric a:** Percent change in wetland acreage on farm parcels, 2011-present **Metric b:** No canopy loss, no new impervious/semi-impervious gain in HRCD data.	N/A	This benchmark for wetland protection is currently monitored using an accounting of BMPs implemented to protect wetlands in Individual Stewardship Plans, cost share projects, and other projects taken on by other entities in the community. Current monitoring is not sufficient. We will also monitor change in wetland acreage using San Juan County's spatial wetland data, we will quantify changes in canopy loss and impervious/semi-impervious gain using HRCD data, and we will conduct monitoring to determine if installed BMPs are still in use.

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WETLANDS Goal 2: Enhance wetland functions related to water quality, water quantity, and habitat (page 63)	Identify actions taken to enhance wetland functions	1. Identify area of enhanced wetlands 2. Identify type of enhancement (See Table E-1 for list of enhancement activities) 3. Use % veg cover as a surrogate – supplement with ISP data	We will use the original benchmark, however, its metrics are further clarified below to include enhancement BMPs and to track BMPs still in operation, while removing the percent vegetative cover metric. Changes in percent vegetative cover are too variable and too costly to use as a metric for this benchmark. On-the-ground assessment is necessary to evaluate enhancement actions; benchmark 2 was developed to address this need. Also, instead of having a separate wetland restoration goal, we have lumped enhancement activities with restoration activities; benchmarks reflect this change. **Benchmark 1:** Actions taken to enhance and/or restore wetland functions **Metric a:** Number of BMPs implemented to improve water quality, water quantity, and habitat **Metric b:** Percent of implemented BMPs still in operation **Benchmark 2:** Improvement in wetland condition following enhancement and/or restoration project. **Metric:** Use a wetland rapid assessment protocol to monitor trends in enhancement and/or restoration projects if funding allows.	Although this goal was met, we are changing the language to be inclusive of restoration actions and removing the separate wetland restoration goal (Goal 3). Goal: Enhance and/or restore wetland functions related to water quality, water quantity, and habitat	This benchmark for wetland enhancement is currently monitored using an accounting of BMPs implemented to enhance wetlands in Individual Stewardship Plans, cost share projects, and other projects taken on by other entities in the community. Current monitoring is not sufficient. If funding allows, we will also monitor change in wetland condition following enhancement and restoration projects using a rapid assessment protocol, and we will conduct monitoring to determine if installed BMPs are still in use.

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WETLANDS Goal 3: Encourage voluntary restoration of wetlands where they intersect with agricultural activities (page 63)	ID actions taken to restore wetlands (e.g., disable drainage tiles)	1. ISPs including revised wetland area maps following successful restoration actions. 2. Updated wetland data layer from San Juan County GIS based on above. 3. Voluntary or other restoration actions (SRFB or other)	Since no wetland restoration projects have been implemented, we decided to lump this goal with the wetland enhancement goal (see Goal 2).	Since no wetland restoration projects have been implemented, we decided to lump this goal with the wetland enhancement goal (see Goal 2).	This benchmark for wetland restoration is currently monitored using an accounting of BMPs implemented to restore wetlands in Individual Stewardship Plans, cost share projects, and other projects taken on by other entities in the community. Current monitoring is not sufficient; however, this goal is being lumped with the wetland enhancement goal, so monitoring is addressed in Goal 2.

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FWHCA Goal 4: Protect Streams (page 69)	ID actions taken to protect streams (e.g., riparian fencing)	1. Quantify lineal feet of stream protected by ISP actions at the watershed scale.	Although this benchmark was met, we would like to add four new benchmarks to account for changes in water quality and stream functions as a result of stream protection measures. These benchmarks are consistent with the narrative in the Work Plan; however, they were left out of the Work Plan summary table of benchmarks and metrics. We are also adding an additional metric to track BMPs still in operation. **Benchmark 1:** Actions taken to protect steams (e.g., riparian fencing) **Metric a:** Lineal feet of stream protected by fencing (or other ISP actions) **Metric b:** Percent of implemented BMPs still in operation **Benchmark 2:** No loss of stream habitat **Metric:** Human-caused tree canopy loss in riparian areas (HRCD) **Benchmark 3:** Maintain stream function scores after protection measures are installed **Metric:** Compare SVAP2 stream function scores before and after protection measures are installed **Benchmark 4:** Maintain water quality in priority watersheds **Metric:** Compare water quality from 2011 to present **Benchmark 5:** Maintain scores for Benthic Index of Biotic Integrity for biologic conditions **Metric:** Compare Benthic Index of Biotic Integrity scores before and after protection measures are installed	N/A	This benchmark for stream protection is currently monitored using the lineal feet of fencing used by BMPs implemented to protect streams in Individual Stewardship Plans, cost share projects, and other projects taken on by other entities in the community. Current monitoring is not sufficient. We will also use a combination of HRCD-derived data on canopy loss, SVAP2 stream function scores, water quality data, and Benthic Index of Biotic Integrity to monitor stream protection, and we will conduct monitoring to determine if installed BMPs are still in use. Water quality data from San Juan County Storm Water Program will be incorporated into future reports to inform a watershed level perspective of the impact of agricultural activities.

FWHCA Goal 5: Enhance Streams (page 69)	ID actions taken to enhance streams (e.g., riparian planting, # of fish passage barriers removed, in-stream structural enhancement activities etc.)	1. Change in riparian cover over time. 2. Change in SVAP2 element scores over time on protected stream reaches – reported by watershed.	Although this benchmark was met, we would like to add three new benchmarks to account for changes in water quality and stream functions as a result of stream enhancement measures. These benchmarks are consistent with the narrative in the Work Plan; however, they were left out of the Work Plan summary table of benchmarks and metrics. We would also like to adjust the existing metrics, since as currently written they are not useful in meeting the original benchmark and add a new metric to track BMPs still in operation. Also, instead of having a separate stream restoration goal, we have lumped enhancement activities with restoration activities; benchmarks reflect this change. **Benchmark 1:** Actions taken to enhance and/or restore streams (e.g., riparian planting, number of fish passage barriers removed, in-stream structural enhancement activities etc.) **Metric a:** Number of BMPs implemented to enhance and/or restore streams **Metric b:** Percent of implemented BMPs still in operation **Benchmark 2:** Improvement in stream function scores after enhancement and/or restoration measures are installed **Metric:** Compare SVAP2 stream function scores before and after enhancement and/or restoration measures are installed **Benchmark 3:** Improve water quality in priority watersheds **Metric:** Compare water quality from 2011 to present **Benchmark 4:** Improve scores for Benthic Index of Biotic Integrity for biologic conditions **Metric:** Compare Benthic Index of Biotic Integrity scores before and after enhancement measures are installed	Although this goal was met, we are changing the language to be inclusive of restoration actions and removing the separate stream restoration goal (Goal 6). Goal: Enhance and/or restore streams	This benchmark for stream enhancement is currently monitored using a combination of spatial analysis (change in riparian cover) and SVAP2. Current monitoring is not sufficient. We do not have multiple datasets to measure riparian cover, and furthermore, if we did, it would be hard to distinguish change as a result of enhancement versus other change agents. Instead, we will use a combination of BMPs implemented to enhance and/or restore streams in Individual Stewardship Plans, cost share projects, and other projects taken on by other entities in the community; SVAP2 stream function scores; water quality data; and Benthic Index of Biotic Integrity to monitor stream enhancement and/or restoration. We will also conduct monitoring to determine if installed BMPs are still in use. Water quality data from San Juan County Storm Water Program will be incorporated into future reports to inform a watershed level perspective of the impact of agricultural activities.

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FWHCA Goal 6: Voluntarily restore streams where they intersect with agricultural activity (page 69)	ID actions taken to voluntarily restore streams	1. Area of stream restored over time.	Since no stream restoration projects have been implemented, we decided to lump this goal with the stream enhancement goal (see Goal 5).	Since no stream restoration projects have been implemented, we decided to lump this goal with the stream enhancement goal (see Goal 5).	This benchmark for stream restoration is currently monitored using BMPs implemented to restore streams in Individual Stewardship Plans, cost share projects, and other projects taken on by other entities in the community. Current monitoring is not sufficient; however, this goal is being lumped with the stream enhancement goal, so monitoring is addressed in Goal 5.

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FWHCA Goal 7: Protect and Enhance Habitats and Species of Local Importance (page 69)	ID actions taken to protect and enhance habitats and species of local importance	1. Area of protected habitat for species of local importance. 2. Area of enhanced habitat for species of local importance.	Although this benchmark was met, we would like to modify the existing metrics and add a benchmark to further address habitat protection/enhancement and add a new metric to track BMPs still in operation. Also, instead of having a separate habitat restoration goal, we have lumped protection and enhancement activities with restoration activities; benchmarks reflect this change. **Benchmark 1:** Actions taken to protect, enhance, and/or restore habitats (excluding stream corridors) **Metric a:** Number of BMPs implemented to protect, enhance, and/or restore habitats (excluding stream corridors) **Metric b:** Percent of implemented BMPs still in operation **Benchmark 2:** No loss of habitats **Metric:** Measure canopy loss and new impervious/semi-impervious gain	Although this goal was met, we are changing the language to be inclusive of restoration actions and removing the separate habitat restoration goal (Goal 8). Goal: Protect, enhance, and/or restore habitats and species of local importance	This benchmark for protecting and enhancing habitats is currently monitored using BMPs in Individual Stewardship Plans, cost share projects, and other projects taken on by other entities in the community. Current monitoring is not sufficient. We will also use HRCD-derived data on canopy loss and new impervious/semi-impervious gain, and we will conduct monitoring to determine if installed BMPs are still in use.
FWHCA Goal 8: Encourage Voluntary Restoration of FWHC Areas (page 69)	ID voluntary restoration actions.	1. ID the area affected by voluntary habitat restoration actions.	Since no habitat restoration projects have been implemented, we decided to lump this goal with the habitat protection and enhancement goal (see Goal 7).	Since no habitat restoration projects have been implemented, we decided to lump this goal with the habitat protection and enhancement goal (see Goal 7).	This benchmark for restoring habitats is currently monitored using BMPs in Individual Stewardship Plans, cost share projects, and other projects taken on by other entities in the community. Current monitoring is sufficient.

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GHA **Goal 9: Avoid and minimize the impacts of sedimentation, erosion, & landslide hazards on water quality and fish and wildlife habitat by upland agricultural use.** (page 72)	ID actions implemented to reduce sediment, erosion, and landslide impacts on GHAs.	1. ID the area affected. 2. Collect water quality samples in priority watersheds. 3. Compare turbidity data over time.	Since no actions have been implemented to minimize impacts, we could increase outreach to farms where GHAs occur. However, there are simply not many farms that intersect with GHAs in this county, and no measurable water quality impact. For this reason, we will not look at water quality parameters to meet this goal. We would keep the existing benchmark but edit the metrics to account for the number of BMPs implemented and add a new metric to track BMPs still in operation. Water quality metrics will not be used. **Benchmark 1:** Actions implemented in GHAs to reduce sediment or erosion, reduce landslide risks, and stabilize steep slopes. **Metric a:** Number of BMPs implemented that reduce sediment or erosion, reduce landslide risk, or stabilize steep slopes **Metric b:** Percent of implemented BMPs still in operation **Benchmark 2:** No loss in vegetative cover in GHAs **Metric:** No canopy loss, no new impervious/semi-impervious gain in GHAs	Although we did not meet this goal, more research is needed to determine if geologically hazardous areas on farmland are causing sedimentation, erosion, and landslide hazards. We will use GIS to identify GHAs on farmland, reach out to operators to better understand the issue, and use resource evaluations in the ISP planning process to determine if agricultural use is causing impacts.	This benchmark for protecting geologically hazardous areas is currently monitored using a combination of BMPs in Individual Stewardship Plans, cost share projects, and other projects taken on by other entities in the community; and water quality data. Current monitoring is not sufficient. We will also use HRCD-derived data on canopy loss and impervious/semi-impervious gain, and we will conduct monitoring to determine if installed BMPs are still in use.

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GHA Goal 10: Avoid and minimize damage to agricultural activities due to erosion, landslides, or other naturally occurring geologic events. (page 72)	ID actions implemented to manage landslide risk and stabilize steep slopes	1. ID the affected area. 2. Document installation of suitable native plants, or other measures taken, as appropriate, to minimize damage	We are removing this benchmark and goal because the goal does not protect or enhance GHAs, but rather is an agricultural viability goal. This benchmark was combined with the existing benchmark in the first GHA goal.	We are removing this benchmark and goal because the goal does not protect or enhance GHAs, but rather is an agricultural viability goal.	This benchmark for minimizing damage to agricultural activities is currently monitored using BMPs in Individual Stewardship Plans, cost share projects, and other projects taken on by other entities in the community. Since the goal does not protect or enhance GHAs, it will be removed. No further monitoring is necessary.

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GHA Goal 11: Avoid activities that increase the natural rate of erosion, while protecting naturally occurring and beneficial ecological processes, such as feeder bluffs. (page 72)	ID actions implemented to manage landslide risk and stabilize steep slopes	1. ID the affected area. 2. Document installation of suitable native plants, or other measures taken, as appropriate, to minimize damage	We are removing this benchmark because the benchmark was combined with the revised benchmark in the first GHA goal.	This goal is very similar to the first GHA goal, in that it involves avoiding activities that cause erosion. We are removing this goal because the first part can be addressed through the first GHA goal, and the second part referring to feeder bluffs, does not apply to VSP. From the Work Plan (page 27) "agricultural activity in the marine shoreline in San Juan County is subject to regulatory review in compliance with the Shoreline Master Program."	This benchmark for protecting geologically hazardous areas is currently monitored using BMPs in Individual Stewardship Plans, cost share projects, and other projects taken on by other entities in the community. Since the goal is being merged with the first GHA goal, it will be removed. No further monitoring is necessary.

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CARA Goal 12: Protect and maintain groundwater recharge and prevent the degradation of groundwater resources due to agricultural activities (page 76)	ID the # and types of BMPs implemented to increase water storage capacity.	1. ID the practices implemented and quantify increased water storage capacity to the extent possible.	We will keep the existing benchmark but modify the metrics to better measure the number and types of BMPs implemented, since we cannot quantify increased water storage capacity, and add a new metric to track BMPs still in operation. **Benchmark 1:** Actions implemented to increase water storage capacity **Metric a:** Number and types of BMPs implemented to maintain groundwater recharge, enhance soil moisture and retention, maximize irrigation efficiency, retain seasonal runoff, and increase infiltration **Metric b:** Percent of implemented BMPs still in operation	We revised this goal to only refer to groundwater storage functions and created a new goal to address groundwater quality (see Goal 14). Goal: Protect and maintain groundwater recharge to support groundwater storage functions	This benchmark for protecting critical aquifer recharge areas is currently monitored using BMPs in Individual Stewardship Plans, cost share projects, and other projects taken on by other entities in the community. Current monitoring is not sufficient. We will also conduct monitoring to determine if installed BMPs are still in use.

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CARA Goal 13: Protect groundwater resources that support agricultural activities and balance competing needs for water while preserving natural hydrologic functions and their related ecological processes (e.g., water quality, and water quantity) (page 76)	ID the # and types of practices implemented to quantify agricultural use of groundwater resources (e.g., well meters).	1. Quantify amount of water needed to support agricultural use, to the extent possible to protect this right, while providing sufficient water for natural hydrologic cycles.	We can modify the benchmark and metric to track any well meter installations but will not be able to report on the amount of water needed to support agricultural use, as the current metric states. We will also add a new metric to track BMPs still in operation. **Benchmark 1:** Actions implemented to quantify agricultural use of groundwater (e.g., well meters, staff gauges) **Metric a:** Number of BMPs implemented to quantify agricultural use of groundwater, including Monitoring Well (353) **Metric b:** Percent of implemented BMPs still in operation	This is a complex goal that addresses the important need of quantifying agricultural use of groundwater; however, we have been unable to access the tools necessary to accurately estimate this use. We will continue to encourage actions such as well meter installations and staff gauges to quantify use and will reevaluate how to use that data as more of it becomes available. Given that this goal also directs us to balance competing needs for water, we will also address it further under agricultural viability.	This benchmark for quantifying groundwater usage is currently monitored using BMPs in Individual Stewardship Plans, cost share projects, and other projects taken on by other entities in the community. Current monitoring is not sufficient, as there are few well meters and not enough water rights to quantify agricultural use of groundwater. However, we will reexamine how to use well meter data and staff gauges as more operators install these devices. We will also conduct monitoring to determine if installed BMPs are still in use.

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CARA Goal 14: Prioritize watersheds with known contaminant problems for management that protects and improves water quality (page 76)	Analyze and report on groundwater quality in priority watersheds that have the greatest intersection with ag activity: False Bay and Garrison Bay on San Juan Island, Westsound and Doe Bay on Orcas, Swift Bay and Davis Bay on Lopez Island.	1. Groundwater quality data from San Juan County Public Health Department, State Department of Health data, Group B well data.	We revised this benchmark to show if groundwater quality is being degraded, maintained, or improved, and added an additional benchmark to account for BMPs implemented that protect water quality. We also added a new metric to track BMPs still in operation. **Benchmark 1:** Maintain groundwater quality in priority watersheds that have the greatest intersection with agricultural activity: False Bay and Garrison Bay on San Juan Island, Westsound and Doe Bay on Orcas Island, Swift Bay and Davis Bay on Lopez Island. **Metric:** Compare water quality from 2011 to present **Benchmark 2:** Actions implemented to protect groundwater quality **Metric a:** Number of BMPs implemented to protect groundwater quality, (e.g., those that prevent nutrient runoff and infiltration) **Metric b:** Percent of implemented BMPs still in operation	We are revising this goal to include some of the water quality degradation language that was removed from the first CARA goal (see Goal 12). Goal: Prevent the degradation of groundwater resources due to agricultural activities, with priority given to watersheds with known contaminant problems	This benchmark for groundwater quality is currently monitored using groundwater quality data from San Juan County Public Health Department. Current monitoring is not sufficient. The water quality analysis did not trigger investigation into agricultural sources during this timeframe. We will continue to utilize public water system water quality information and work with County Health and Community Services when needed. We will also use BMPs that protect groundwater quality, including BMPs to prevent nutrient runoff and infiltration, in Individual Stewardship Plans, cost share projects, and other projects taken on by other entities in the community. We will also conduct monitoring to determine if installed BMPs are still in use.

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FFA Goal 15: Minimize flood damage to agricultural properties and operations (page 80)	Measure the acreage of Frequently Flooded Areas where it intersects with agricultural activity every 5 years. (Using SJC GIS mapping (inc. FEMA FIRM maps).	1. The acreage of frequently flooded areas protected by ISP actions.	Although we are removing this goal and benchmark, we will use the metric in the adaptive management section for the second FFA goal (see Goal 16).	We are deleting this goal because it does nothing to protect or enhance FFAs.	This benchmark for minimizing damage to agricultural activities is currently monitored using BMPs in Individual Stewardship Plans, cost share projects, and other projects taken on by other entities in the community. Since the goal does not protect or enhance FFAs, it will be removed. No further monitoring is necessary.

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FFA Goal 16: Protect and enhance Frequently Flooded Areas for habitat and groundwater recharge (page 80)	Measure the change in impervious surface area and vegetative cover in FFAs that intersect with agricultural activity over time.	1. Measure the change in impervious surface areas over time.	To properly measure this goal, the original benchmark is reworded to make it more measurable, along with the addition of tree canopy loss. Also, an additional benchmark is needed to measure practices implemented to protect or enhance FFAs, and we added a new metric to track BMPs still in operation. **Benchmark 1:** Maintain or reduce baseline impervious/semi-impervious surface area and tree canopy loss **Metric:** Measure the change in impervious/semi-impervious surface areas and tree canopy loss between 2011 and present **Benchmark 2:** Actions implemented to preserve natural flood control, stormwater storage, drainage, and floodplain connectivity **Metric a:** Number of BMPs implemented **Metric b:** Acreage of FFAs protected or enhanced **Metric c:** Percent of implemented BMPs still in operation	Since we did not meet this goal, we will work on increasing outreach to operators in FFAs to better target those areas. Additionally, for the next reporting period, we hope to have more time to fully analyze HRCD results to understand where the changes have occurred, and the kinds of changes that occurred.	This benchmark for protecting and enhancing frequently flooded areas is currently monitored using HRCD-derived data on impervious surface change. Current monitoring is not sufficient. We will also use change in semi-impervious surface areas, tree canopy loss, and BMPs in Individual Stewardship Plans, cost share projects, and other projects taken on by other entities in the community; and we will conduct monitoring to determine if installed BMPs are still in use.

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FFA Goal 17: Preserve natural flood control, stormwater storage, and drainage, and floodplain connectivity, including flood channels and/or high-flow channels (page 80)	Acreage of Frequently Flooded Areas where they intersect with ag activity.	1. ID acreage/area of reconnected floodplain, by watershed. 2. ID BMPs implemented to increase surface water storage 3. ID BMPs implemented to protect floodplain 4. Quantify acreage/area protected by BMPs	Since the current benchmark is not helpful, and the metrics have been condensed and moved to the second FFA goal's benchmark, this benchmark and goal will be deleted.	We are deleting this goal and moving all its elements to the second FFA goal's benchmark (see Goal 16).	This benchmark for the acreage of frequently flooded areas was measured by reconnected floodplain (which is not mapped so it does not exist), and BMPs for water storage and floodplain protection. Current monitoring is not sufficient. However, this goal is being deleted so no further monitoring is necessary.

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Participation Goal 18: Maintain and Improve Ag Viability Over Time (page 50)	Achieve and maintain participation of agricultural producers of greater than 20 percent by 2020 and greater than 40 percent by 2025.	1. Percent of agricultural producers participating in VSP. 2. Percent of agricultural acres of farms participating that intersect with critical areas.	Although this benchmark was met for 2020, we are changing it because the number of agricultural producers varies each year and using a percentage of that number creates an inconsistent benchmark to work toward. Furthermore, the accounting for the number of producers varies widely depending on the sources used. For example, our contract uses the figure of 150 producers, whereas the Work Plan uses 250, and the US Census reports 317. For this reason, we will use the rate at which we can produce ISPs, which at minimum is eight per year. This change will allow more funding to be directed toward improving outreach, especially to livestock producers in key watersheds; increasing implementation and effectiveness monitoring; and supporting Work Group coordination and function. **Benchmark 1:** Achieve and maintain participation of at least eight agricultural producers per year **Metric a:** The number of ISPs written per year **Metric b:** Agricultural acres of farms with ISPs as a percent of total agricultural acres	N/A	Participation is being monitored by keeping a count of the number of agricultural producers for whom we write ISPs. We take this count and calculate a percentage of the total of all producers, which currently is estimated to be 150 in the county.

Conclusion

In conclusion, this Adaptive Management Plan was designed to help San Juan County better meet its goals and benchmarks for protection and enhancement of critical areas on farmland. Many of the changes clarify how the San Juan Islands Conservation District will fulfill its responsibilities under the VSP Work Plan. Additionally, changes were made to address goals and/or benchmarks that have not been met. In these cases, additional work will be needed, usually in the form of outreach, to reach more farm operators and to increase the number of best management practices implemented to protect or enhance critical areas. With these changes moving forward, San Juan County will be better prepared to achieve its goals and benchmarks during the next five-year reporting period.