WEST YOST ASSOCIATES
Consulting Engineers

November 9, 2017

Project No.: 755-10-17-01.007
SENT VIA: EMAIL

Ms. Angela Spain
City of Chico
411 Main Street
Chico CA 95928

SUBJECT: City of Chico Storm Water Resource Plan—Response to Comments on Initial Project Screening

Dear Ms. Spain:

The attached table presents the response to comments received on September 8th, 2017 on the Big Chico Creek and Little Chico Creek Storm Water Resource Plan (SWRP) Initial Project Screening. This response to comments should be posted on the City's SWRP website for review by the public, the Technical Advisory Committee, and any other interested parties.

DISCLOSURE STATEMENT

Funding has been provided in full or in part through an agreement with the State Water Resources Control Board, using funds from Proposition 1. The contents of this document do not necessarily reflect the views and policies of the foregoing, nor does the mention of trade names or commercial products constitute endorsement or recommendation for use.

This letter is part of the work product for Task 4.5 of Grant Agreement No. D1612613 between the City of Chico and the California State Water Resource Control Board.

Please contact me at (530) 792-3275 or dmoore@westyost.com with any questions or comments.

Sincerely,
WEST YOST ASSOCIATES

Douglas T. Moore
Engineering Manager
RCE #58122
DTM:lh

Table 1. Comments and Responses on the Intial Project Screening

Project Number or Letter	Title of Recommended Project	Project Description	Publicly Owned Land Evaluation (High, Medium, Low)	Project Sponsor Evaluation* (Yes, No)	Estimated Affordability Evaluation High, Medium, Low	Implementability Evaluation (High, Medium, Low)	Evaluate as a SWRP Project or Retain as an Initial Project (note A) (SWRP or Initial)	Comments Received from Stream Team	Response to Comment
1	21st Century Management Program: Big Chico Creek and Mud Creek Watershed.	The proposed project is to develop and implement a multifaceted, holistic program to manage the flood protection system of diversions and levees from Five Mile Recreation Area in Chico to the Sacramento River. The goals of the project would be to: -Ensure the integrity of the flood control system. -Fully assess the system using modern analysis techniques and increased data, and assure that the system can protect the urban area while considering possible climatic changes. -Manage gravel deposition at Five Mile and assure proper gravel migration downstream. -Develop management strategies that maximize benefits to salmon populations. -Coordinate with the Bicycle Plan. -Optimize recreational opportunities. -Identify opportunities to enhance riparian habitat, with an emphasis on endangered species such as the Sacramento Valley Long-horned Beetle. -Ensure system provides 200-yr level of protection per State regulations. -Maximize the use of County Service Area 24 funds.	Medium	Yes, City of Chico	Medium	High	SWRP, combined into M		
2	Teichert Ponds Improvement Project	Reconstruction of inlet to provide capture of trash, suspended solids, hydrocarbons, etc. Reconstruction of outlet to Little Chico Creek to provide control, accessibility, and maintainability. Vegetation management to eradicate non-native plants and help manage illegal camping.	High	Yes, City of Chico	Low	Medium	SWRP, combined into Q, Trash filtering component combined into I, includes POEI*	Duplicate on list under both (Q and I). Public land is High.	In the original file provided to Stream Team, there was no duplication of Project 2. The Publicly Owned Land rating has now been changed to high.
3	21st Century Management Program: Little Chico Creek to Butte Creek Diversion.	The proposed project is to develop and implement a multifaceted, holistic program to manage the flood protection system of diversions and levees from Little Chico Creek to Butte Creek. The goals of the project would be to: - Ensure the integrity of the flood control system. - Fully assess the system using modern analysis techniques and increased data, and assure that the system can protect the urban area while considering possible climatic changes. - Identify improvements required to achieve FEMA certification. - Coordinate with the Bicycle Plan. - Optimize recreational opportunities. - Identify opportunities to enhance riparian habitat, with an emphasis on endangered species such as the Sacramento Valley Long-horned Beetle. - Ensure system provides 200-yr level of protection per State regulations.	Medium	Yes, City of Chico	Medium	High	SWRP, combined into N		
4	Big Chico Creek bank erosion	The creek bank just a few feet away from CARD's water well on BCC at Hooker Oak Park is eroding. A solution for this problem has been designed; implementation could be part of a future storm water grant application.	High	Yes, City of Chico	Medium	Low	SWRP, combined into M, includes POEI*	Affordability could be low depending on the site. Implementability is High. Small revegetation projects can be identified and implemented cheaply by the public, for example Lost Park. POEI	This project is a bank stabilization project at a specific location. The comment appears to be addressing the project as if the project was general erosion stabilization located at many undefined locations. Revegetation itself is relatively low cost, but can only occur after high cost stabilization work, so therefore, affordability has been changed to medium for this specific project at this specific location. Implementability was listed as low because this project will require several permits to be acquired from the CDFW, the USACE, and the RWQCB. POEI is already listed for this project.
5	Big Chico Creek storm water detention	Create a storm water detention area in Lower Bidwell Park just west of the east most parking area off Peterson Memorial Drive. This area has previously flooded (i.e. Scout's Island) and has the capacity to occasionally detain enough water to reduce downstream flooding without affecting any major infrastructure such as Petersen Dr. Consider making a small detention basin on the right (north) bank of BCC just downstream of the Vallombrosa Bridge. This is part of the city-owned Lost Park area. Currently several north side properties closer to the Esplanade Bridge as well as the south side of Lost Park experience flood water conditions during high water events. Correcting a scour problem at Big Chico Creek's Vallombrosa Bridge is listed in the city's Capital Projects plan. Incorporate this fix into a grant proposal as an in-kind match.	High	No	Low	Medium	SWRP, combined into M	Implentability is High. Similar to Project 71.	Implementability was listed as medium because these two detention basin projects will require hydrologic and hydraulic modeling to determine the level of flood protection that would be achieved and to determine if the flood protection justifies the costs of the basins. Also, the basins and the erosion stabilization will require several permits to be acquired from the CDFW, the USACE, and the RWQCB, and approval from the Bidwell Park and Playground Commission. This project does not appear to be similar to Project 71.
6	Comanche Creek flow improvements	Develop a plan to remove invasive yellow flag iris from CC. This plant spreads via seeds and rhizomes and, by filling the stream bed with plants, widens the stream bed, causing bank erosion and flooding (especially at Paseo Campaneros) The upstream-most infestation is at Neighborhood Church. Downstream-most location is unknown. Starting area for removal could be at CCG, with outreach to upstream and downstream property owners to educate them about the problem and provide solutions. Survey CC starting at the Fair St. Detention Basin to identify obstacles in the creek and develop a plan to remove them. Reduce silt buildup in CC through the residential and business area from the Detention Basin outlet to Midway. Reduce silt entering CC via the Basin.	Medium	No	Medium	Medium	SWRP, combined into O		
7	Comanche Creek water quality	Provide better trash filtering at outlet from Fair St. Detention basin into CC. Provide filtering of storm water runoff at northwest outlet at Midway Bridge and at outlets at Valine and Wrex. Provide filtering of storm water runoff from Hegan Lane Business Park (outlet into CC is west of CCG, pollutants are probably mostly hydrocarbons from the large amount of impervious surfaces of parking lot and street parking). Encourage alternative transportation for employees of businesses in this area, as currently all of Otterson Dr. is used by employee parking for Build.com. Develop a working relationship with M&T Ranch to coordinate communications about their control of the water level in CC with creek cleanups and other in-stream activities. Develop a better understanding of when they reduce water flows and plan in-stream activities based on this information. Provide real-time online information about water flow diversion into Comanche Creek (CC) at Phelan Dam to help with trash removal efforts downstream, especially at Comanche Creek Greenway (CCG). Convert southwest outlet at Midway Bridge into a bioswale. Much of CC's trash comes from homeless camps under the Midway Bridge and upstream to the bike bridge. Provide fencing to make it more difficult for campers to bring large items to their camp sites and consider ways to reduce the desirability of camping under these bridges and nearby. Eliminate creekside camping sites at CCG wherever possible.	High	No	Medium	Medium	SWRP, combined into O		
8	Lindo Channel infiltration enhancement	Use the city-owned area of upstream of the Madrone bike bridge for storm water infiltration	High	Yes, City of Chico	Medium	Medium	SWRP, combined into M, includes POEI*	Implementability is High	Implementability was changed to medium (rather than high) because construction in the Lindo Channel will require several permits to be acquired from the CDFW, the USACE, and the RWQCB.
9	Lindo Channel nonpoint pollution	Re-do access roads into to channel to make it easier to haul out debris from homeless camp cleanups. Identify areas where camping and associated camp cleanups regularly occur and develop and implement solutions to reduce camping at those locations (e.g. elevating vegetation, regular monitoring, etc.). Add trash filter at Chico Nut storm water drain Add bioswales to storm water outlets from Manzanita to Esplanade, where stream channel is wide enough to accommodate.	High	No	Medium	High	SWRP, combined into M, includes POEI*		
10	Little Chico Creek flooding problems	Due to the increase in impervious surfaces (e.g. East 8th St road reconstruction project) downstream of the Little Chico Creek (LCC) diversion into Butte Creek at the Stilson Canyon diversion, the diversion point needs to be recalibrated. Provide infiltration area on city property just downstream of the diversion. Consider using the city's Linear Parks and Greenways Fund to purchase the small amount of open space land in this area that's not already owned by the city so that this infiltration area can be maximized. Look at the many other city-owned properties along the creek for other infiltration opportunities. Consider using the city-owned former RDA property north of the Boucher St. bridge into a storm water infiltration area. The creek bank is low in that area and the property is already subject to occasional flooding. LCC's carrying capacity has been reduced by excessive growth of invasive plants and tree-falls that block storm water flows. Develop a plan in coordination with DWR to identify the worst areas and provide ongoing maintenance to keep them clear. Also, provide a mechanism for residents to report new problems to the appropriate agency. Correcting a scour problem at LCC's Walnut St Bridge is listed in the city's Capital Projects plan. Incorporate this fix into a grant proposal as an in-kind match.	Medium	No	Medium	Medium	SWRP, combined into N, includes POEI*		

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11	Little Chico Creek water quality	For the last several years, the city has been treating arundo donax on city properties along LCC and removing it using volunteer labor (1100+ hours of volunteer work so far, plus other donations for associated removal costs). Continue this process, work with other public agencies that also own LCC creek bank property (e.g. Butte County Housing Authority, Chico Unified School District) to help remove their arundo and develop a protocol for private property owners who wish to remove their arundo. As needed, work with the Chico Fire Dept. to develop regulations requiring arundo removal, as a fire hazard. Work with USDA's Natural Resources Conservation Service, which has offered to help property owners downstream of the Chico city limits also remove their arundo. Identify areas along LCC where creek bank erosion is a significant problem (e.g. the left bank downstream of the Chestnut St. Bridge) and develop solutions to reduce future erosion in these areas). Consider possible future impacts should the Chapmantown annexation result in additional storm water entering LCC. Homeless camps in LCC are likely the largest source of trash within the creek. The longer a camp remains, the more trash and large items accumulate at the camp, complicating the eventual cleanup. A more transparent system for citizens to report camps is needed and additional resources to provide the move-out notifications, cleanups and hauling of the trash. Vegetation removal would help reduce camping in some locations, heavy-duty fencing at bridges is another way to reduce creek access. Also, because there are so many easy access points along the creek, there's a lot of household trash dumping and of large items such as mattresses and couches. Love Chapman has helped to alleviate this problem by offering an annual cleanup day, with free hauling of large items to the pickup location and drop-off of trash, recycling, and vegetation. Other creekside neighborhoods could offer similar services, with BEC or another NGO being paid to organize events.	High	No	High	Medium	SWRP, combined into N, includes POEI*		
12	Mitigating new impacts to Sycamore Bypass	There are several large new residential subdivisions to the south of Sycamore Bypass. Improve outdoor recreational opportunities for these residents by completing the planned bike path along the Bypass to connect to the Floral Ave bike path and by creating well-designed paths into the Bypass area (instead of letting each user create his/her own path). Provide educational signage and materials to the homeowners associations to discourage yard waste and trash dumping into the Bypass.	High	Yes, City of Chico	High	High	SWRP, combined into M, includes POEI*		
13	Teichert Ponds retention basins	Reroute the small east side storm drains so that they don't dump directly into Pond 1. Remove the silt buildup in the ponds and its associated contaminants. Separate Pond 1 (freshwater) from Ponds 2-3 and rework Ponds 2 and 3 so that Pond 2 can be periodically drained and cleaned. Work with the Butte County Mosquito and Vector Control District to develop a plan that will reduce the need for mosquito control.	High	Yes, City of Chico	Medium	Medium	SWRP, combined into Q, includes POEI*	Implementability is High. Why yes for public land instead of High?	Publicly owned land was changed to High. Implementability was changed to medium (rather than high) because construction in at Teichert Ponds will require several permits to be acquired from the CDFW, the USACE, and the RWQCB.
14	Teichert Ponds vegetation, trash and public access	Remove the major invasive plant species: parrot's feather, tree of heaven, Himalayan blackberry, Chinese tallow tree, pyracantha and arundo (1-2 small stands). The dirt roadway on the north side floods almost every winter. Solve this problem. Finish removing the chain link fencing around Pond 1 to improve access for invasive plant control and trash cleanup. Construct a walking trail on the east side of the Ponds to improve public access and reduce undesirable behavior (camping, encroachments by east side neighbors, yard waste dumping). Homeless camping is a major problem here; however, most of the camps are outside of the storm water area so they don 't directly affect the amount of trash going into Little Chico Creek. Improve trash filtering on major east side storm water inlet and add filter on south inlet.	High	Yes, City of Chico	High	Medium	SWRP, combined into Q, Trash filtering component combined into I, includes POEI*	Implementability is High. Why yes for public land instead of High?	Publicly owned land was changed to High. Implementability was changed to medium (rather than high) because construction in at Teichert Ponds will require several permits to be acquired from the CDFW, the USACE, and the RWQCB.
15	Bank Slope Reduction and Stabilization	Many of the rural roadside ditches and agricultural drainage channels have overly-steep banks, which leads to bank erosion, deposition of sediment in the channel, and damage to public roads, maintenance roads and farmland. Bank segments with severe bank erosion could be identified and evaluated for bank slope reduction. Potential stabilization methods that could be evaluated include slope reduction, vegetation with deep rooted native California grasses, and/or stabilization with articulated block pavers.	Medium	Yes, City of Chico	Medium	Medium	SWRP, combined into P	Why O and not P or M?	This project was not combined into project O. This project was already combined into Project P.
16	Channel Stabilization	Provide structural erosion at outfalls, along bridges and structures, major bends in waterways, revegetate various stream segments, acquire property along streams to allow for a "buffer" zone. This will meet the Water Quality benefits as well as riparian enhancement.	Medium	Yes, City of Chico	Medium	Medium	SWRP, combined with 68		
17	Detention Basins on Comanche Creek	Construct detention basins per the 1997 Amendment to SDMP, but include storm water wetlands, or community parks as appropriate.	Medium	Yes, City of Chico	Low	Low	SWRP, combined into O		
18	Detention Basins on Little Chico Creek	The Project will provide flood control along little Chico Creek per the SDMP, but will have water quality wetlands or community park as appropriate.	Medium	Yes, City of Chico	Low	Low	SWRP, combined into N		
19	Grassy Swale in Bidwell Park	Install grassy swale in Bidwell Park to provide natural treatment and some minor detention, along with infiltration	High	Yes, City of Chico	Medium	Low	SWRP, combined into M, includes POEI*	Not a flood project, Implementability is High Afforability is low. Project not plan.	Flood control was not listed as a benefit of this project. This project includes general implementation of grassy swales in Bidwell Park. It does not identify specific locations where grassy swales would be implemented. Consequently, before actual swales are constructed, a plan will need to be developed to select the best and most affordable locations. This project was included in Project M because Project M includes LID where feasible. Also, this project will require several permits to be acquired from the CDFW, the USACE, and/or the RWQCB, and approval from the Bidwell Park and Playground Commission. Consequently, Implementability was listed as low. Affordability was listed as medium because the planning and permitting will will be expensive, but after the planning and permitting are completed, the grassy swales may be relatively inexpensive.
20	Green Streets and Parking Lots	Street segments and parking lots could be retrofitted into green streets or green parking lots using vegetated swales, vegetated buffer strips, bioretention planters, and mechanical treatment systems	High	Yes, City of Chico	Low	Medium	SWRP, combined into P, includes POEI*	Combine w/20, 25, 82, 74 (and/or letter N)	This project includes general implementation of Green Street and Green Parking Lots. It does not identify specific locations where Green Streets and Green Parking Lots would be implemented. Consequently, before actual Green Streets and Parking Lots would be constructed, a plan will need to be developed to select the best and most affordable locations. This project was combined with Project P because Project P includes development of a plan to identify the best locations for Green Streets and parking lots. It was not included in Project N because Project N is only for Little Chico Creek, and this project would evaluate the use of Green Streets and Parking lots on a City-wide basis. It was not included in Project 20 because this project is Project 20. This project was not included in Project 25 because Project 25 was revised and replaced by Project 81. This project was not included in Project 82 because Project 82 is four specific projects previously inlcuded in the NSV IRWMP, and this project was not included in the NSV IRWMP.
21	Make City Corp Yards Storm Water Friendly	The City/County Corporation Yards could be evaluated for implementation of best management practices such as grassy swales, infiltration trenches, rock infiltration wells and other water quality treatment and low flow/dry weather runoff infiltration facilities.	High	Yes, City of Chico	Medium	High	SWRP, combined into N (Includes POEI*)		
22	Outreach and Maintenance of Parks	Establish a stream maintenance inspection and monitoring program, include trash and debris removal, exotic plant eradication, revegetation and stream bank repair and maintenance. Could lean heavily on volunteers.	High	Yes, City of Chico	Medium	High	SWRP, combined into P, includes POEI*	Implementability is High	Implementability was changed to high because some aspects of this project can easily be implemented. However, stream bank repair and maintenance activities could require several permits to be acquired from the CDFW, the USACE, and the RWQCB, and for the stream bank repair and maintenance the implementability would be medium.
23	Trash Capture Devices	Use City's land use map and storm water system map to locate and size trash capture devices. These trash capture devices can be implemented along with other modifications to detention basins, including grassy swales, infiltration trenches, rock infiltration wells, and low flow/dry weather runoff infiltration facilities.	Medium	Yes, City of Chico	Low	High	SWRP, combined into I, includes POEI*		
24	Waterwise and Habitat and River Friendly Landscape Program	Project includes: - Implementation of low impact development techniques and water quality best management practices. - Public outreach, education, and involvement related to storm water and other issues. - Citizen based storm water monitoring. See detailed project description provided in Attachment A.	Medium	Yes, Stream Team	Low	Medium	SWRP, combined into P, includes POEI*	Sponsor is yes (Stream Team). Affordability is low. Implementability is High. Why not group as you did with other projects under a letter (M, N)? Also has PEOI.	The sponsorship has been changed to Stream Team. The project is already listed with low affordability. Implementability remains medium because the project description is vague and includes many different objectives and prioritizing the objectives will be needed. Developing specific actions to implement the various objectives will also have to be developed and evaluated. Each one of the objectives essentially constitutes an entire project/program by itself. This project has now been grouped with Project P, and POEI has now been added.
25	Chico Green Streets and Low Impact Development Implementation Project	Project includes: - Implementation of low impact development techniques and water quality best management practices. - Public outreach, education, and involvement related to storm water and other issues. - Citizen based storm water monitoring. See detailed project description provided in Attachment A.	Medium	No	Low	Medium	Initial		

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26	Bidwell Park and Greenway Integrated Storm Water, Ground Water Recharge, and Recycled Water Project	Project includes: - Implementation of low impact development techniques and water quality best management practices. - Public outreach, education, and involvement related to storm water and other issues. - Citizen based storm water monitoring. See detailed project description provided in Attachment A.	Medium	Yes, City of Chico	Low	Medium	SWRP, combined with Project 71 into P, includes POEI*	Implementability is High. Combine w/71 and is it P (SW master plan) or M (21st plan)	Project 26 is now combined with Project 71, and both projects are combined into Project P. Project is not combined with Project M, because Projects 26 and 71 have many aspects (some listed below) that are beyond what is included in Project M, which is focused on just Big Chico Creek. Implementability remains medium because the project description is vague and includes many different objectives and prioritizing the objectives will be needed. Developing specific actions to implement the various objectives will also have to be developed and evaluated. Each one of the objectives essentially constitutes an entire project/program by itself.
27	Cal Park Green Streets Project	Project includes: - Implementation of low impact development techniques and water quality best management practices. - Public outreach, education, and involvement related to storm water and other issues. - Citizen based storm water monitoring. See detailed project description provided in Attachment A.	Medium	No	Low	Medium	Initial		
28	City of Chico Long-term Trash Reduction Project	Project includes: - Implementation of low impact development techniques and water quality best management practices. - Public outreach, education, and involvement related to storm water and other issues. - Citizen based storm water monitoring. See detailed project description provided in Attachment A.	Medium	No	Low	Medium	Initial		
29	LID Technical Design Manual and Demonstration Project	Project includes: - Implementation of low impact development techniques and water quality best management practices. - Public outreach, education, and involvement related to storm water and other issues. - Citizen based storm water monitoring. See detailed project description provided in Attachment A.	Medium	Yes, City of Chico	Low	Medium	SWRP, combined into P, includes POEI*		
30	Chico State University LID Implementation and Stream Habitat Enhancement Project	Project includes: - Implementation of low impact development techniques and water quality best management practices. - Public outreach, education, and involvement related to storm water and other issues. - Citizen based storm water monitoring. See detailed project description provided in Attachment A.	Medium	No	Low	Medium	Initial		
31	Five Mile, Lindo Channel, and Sycamore Flood Diversion Storm Water Treatment and Habitat Enhancement Project	Project includes: - Implementation of low impact development techniques and water quality best management practices. - Public outreach, education, and involvement related to storm water and other issues. - Citizen based storm water monitoring. See detailed project description provided in Attachment A.	Medium	No	Low	Medium	Initial		
32	Chapman/Mulberry Neighborhood Green Infrastructure and Natural Storm Water Treatment Project	Project includes: - Implementation of low impact development techniques and water quality best management practices. - Public outreach, education, and involvement related to storm water and other issues. - Citizen based storm water monitoring. See detailed project description provided in Attachment A.	Medium	No	Low	Medium	Initial		
33	Mud and Rock Creek Flood Protection Project	Project includes: - Implementation of low impact development techniques and water quality best management practices. - Public outreach, education, and involvement related to storm water and other issues. - Citizen based storm water monitoring. See detailed project description provided in Attachment A.	Medium	Yes, Stream Team	Low	Medium	SWRP, includes POEI*	Why is this project not grouped? Sponsor is yes, as either Mud Creek Recalamation District (Robin McCullum?) or Stream Team, or why not City? How was Affordability and Implementability evaluated?	This project is a standalone project because the vast majority of Mud and Rock Creek Watersheds are outside the City and the City's Sphere of Influence. The sponsorship has been changed to Stream Team. Implementability remains medium and affordability remains low because the project description is vague and includes many different objectives and prioritizing the objectives and will be needed. Developing specific actions to implement the various objectives will also have to be developed and evaluated.

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34	Little Chico Creek, Lindo channel, Mud/Rock Creek Arundo/Broom Removal and LID Implementation Project	Project includes: - Implementation of low impact development techniques and water quality best management practices. - Public outreach, education, and involvement related to storm water and other issues. - Citizen based storm water monitoring. See detailed project description provided in Attachment A.	Medium	No	Low	Medium	Initial		
35	Flood Detention Pond (Comanche, Fair Street, Home Depot, Teichert) Enhancement and LID Implementation Project	Project includes: - Implementation of low impact development techniques and water quality best management practices. - Public outreach, education, and involvement related to storm water and other issues. - Citizen based storm water monitoring. See detailed project description provided in Attachment A.	Medium	Yes, City of Chico	Low	Medium	SWRP, combined into O, Teichert Ponds combined into Project Q, includes POEI*	Grouping w/O or R? Similar projects: 35, 43, 60	Project is already combined with Project O. Teichert Pond is now combined into Project Q. Project R is specific to the Fair Street Detention Basin, whereas this project includes several other basins. Projects 43 and 60 are specific to the Fair Street Detention Basin, so they were grouped into Project R.
36	Low Impact Development and Green Infrastructure Implementation Program for Butte County Schools	Project includes: - Implementation of low impact development techniques and water quality best management practices on specific school sites. - Public outreach, education, and involvement related to storm water and other issues. - Citizen based storm water monitoring. See detailed project description provided in Attachment A.	Medium	Yes, Chico Unified School District	Low	Medium	Initial		
37	City of Chico storm water capture and reuse project	Project includes: - Implementation of low impact development techniques and water quality best management practices. - Public outreach, education, and involvement related to storm water and other issues. - Citizen based storm water monitoring. See detailed project description provided in Attachment A.	Medium	Yes, City of Chico	Low	Medium	SWRP, combined into P, includes POEI*	Why not group under M, N, O, Q? This is intended to be an implementation project (vegetation managmen, LID demos, trash reduction actions, etc.) but the update was accidently not uploaded. Targets Big Chico/Little Chico creek. Implementability is High.	Project M is specific to Big Chico Creek. Project N is specific to Little Chico Creek. Project O is specific to Comanche Creek. Project Q is specific to Teichert Ponds. This project includes implementation of LID at unspecified locations, consequently, it was grouped with Project P, which is a City-wide update of storm water planning and policies. Project P also incudes developing LID implementation, creek clean ups, water quality monitoring, and many other types of projects and programs. This is not an implementation project because it does not identify specific locations for project implementation. It identified general goals to be achieved throughout the watershed, including LID implementation, public outreach and training, increasing employment opportunities, green job training, and linking citizen monitoring with the City Storm Water Management Program. These are mostly programs, not implementation projects. Implementability remains medium because the project description is not specific and includes many different objectives and prioritizing the objectives will be needed. Developing specific actions to implement the various objectives will also have to be developed and evaluated. Each one of the objectives essentially constitutes an entire project/program by itself.
38	Urban Landscape Water Conservation and Pesticide Reduction Project	Project includes: - Implementation of low impact development techniques and water quality best management practices. - Public outreach, education, and involvement related to storm water and other issues. - Citizen based storm water monitoring. See detailed project description provided in Attachment A.	Medium	No	Low	Medium	Initial		
39	NSV IRWM Projects (submitted by CA Urban Streams Alliance-The Stream Team)	Project includes: - Implementation of low impact development techniques and water quality best management practices. - Public outreach, education, and involvement related to storm water and other issues. - Citizen based storm water monitoring. See detailed project description provided in Attachment A.	Medium	No	Low	Medium	Initial		
40	Parking Lot 4 Rehabilitation #50019	Replacement of existing deteriorated asphalt paving with permeable pavement or pavers.	High	Yes, City of Chico	Medium	High	SWRP, includes POEI*		
41	Improve Lindo Channel	Remove vegetation, debris, rock, silt, repair outfalls, and reestablish channel capacity to reduce flooding and erosion of public infrastructure. Include a bikeway to increase public open space.	High	Yes, City of Chico	Medium	Medium	SWRP, combined into M, includes POEI*	Affordability could be low depending on the site. Implementability is High. Small revegetation projects can be identified and implemented cheaply by the public, for example Lost Park. POEI	This project does not identify specific locations or projects. Affordability at specific sites could be low, medium , or high; consequently, Affordability was give a medium rating. Implementability at specific sites could be low, medium , or high; consequently, the Implementability is now changed to medium. POEI is now added.
42	Teichert Ponds Improvement	Remove vegetation, limit illegal encampment to reduce trash buildup, improve paths/roads round the pond. Improve outfall screening to reducing buildup and flooding.	High	Yes, City of Chico	Medium	Medium	SWRP, combined into Q, includes POEI*	Affordability and impemtability rankings, how were they evaluated?	The Implementability and Affordability ratings were evaluated relative to other projects. This project received medium ratings because it is for a specific site, but the specific improvements are not defined. Many of the project elements will require several permits to be acquired from the CDFW, the USACE, and the RWQCB.

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43	Fair Street Detention Basin Improvements	Remove vegetation to limit illegal encampments (trash buildup), improve paths/roads around pond. Improve outfall screening to reduce buildup and flooding.	High	Yes, City of Chico	Medium	Medium	SWRP, combined into R, includes POEI*	Grouping w/O or R? Similar projects: 35, 43, 60	Project is already combined with Project R since Project R is specific to the Fair Street Detention Basin. Projects 43 and 60 are specific to the Fair Street Detention Basin, so they were also grouped into Project R. Project 35 includes several detention basins, is not specific to a single basin, and consequently was grouped into Project O which covers several detention basins. Many of the project elements will require several permits to be acquired from the CDFW, the USACE, and the RWQCB.
44	5 Mile and Lindo Channel Diversion Structures Study	Review effectiveness of current gate settings, adjust as needed. This past year, we visually observed a lot of capacity in Mud/Sycamore Creek, when Big Chico Creek and Lindo Channel were running so high that localized flooding developed. Balancing of flows could decrease scour, provide flood protection, and improve habitat.	High	Yes, City of Chico	Medium	High	SWRP	Why not grouped under M or P? Why stand-alond SWRP project?	This project could be grouped under Project M. However, this project would address one specific element of the range of potential projects that Project M covers, specifically improving flood control by adjusting the existing gate settings. There is also a potential funding opportunity through Community Service Area 24. Consequently, this was kept as a separate project so it could be evaluated independently of the much larger Project M.
45	Big Chico Creek and Lindo Channel Diversions Study and Improvements	Evaluate the current capacities of the Big Chico Creek Gates, the Lindo Channel Gates, and the Sycamore Weir in relation to the Sycamore Pool capacity and water surface elevations. Consider the establishment of a regular sediment removal process and implementation of a routine maintenance agreement between the City/County and DWR.	High	Yes, City of Chico	Medium	High	SWRP, combined into M		
46	Lindo Channel Management Plan	Establish a long term management plan for Lindo Channel in order to re-establish the channel capacity back to its original design and to ensure the occurrence of regular maintenance. Consider need for flood control easement for managing vegetation growth and debris buildup, and limiting flow distribution issues. Study the capacity of Mud Creek to evaluate the potential to re-route flows.	High	Yes, City of Chico	Medium	High	SWRP, combined into M	Implementability is High (plan)	Implementability of the study is now rated high.
47	Medical Waste Program for unused medicine	Providing medical waste drop off points would decrease the amount of leftover medication that gets flushed in toilets and thus discharged to WWTPs. WWTPs struggle to remove these medications so they get discharged in WWTP effluent to the creeks.	High	No	Medium	High	Initial	Why grouped as stand-alone SWRP project instead of grouped under M, N, O, Q, (or P) ? Affordability is Low.	This project is not a storm water project and therefore was retained as an Initial Project.
48	Sycamore and Mud Creek Flood Control	A combination of sediment and vegetation management projects are needed at various locations throughout Mud and Sycamore Creeks to maintain the existing design capacity of the system: the construction of grade control structures would in theory stabilize the slope of the channel upstream of Cohasset Road and downstream of the Diversion Channel. The structures could also act as sediment catchments to allow for the removal of excess sediment and to prevent the transport of additional sediment downstream where it negatively affects other parts of the system. Benefits include reducing long term O&M costs and reducing adverse environmental impacts to the system.	High	Yes, City of Chico	Low	Low	SWRP, combined into M	Why was affordability and implementability ranked as low?	The vegetation management portion of the project are relatively affordable and implementable. However, the construction of grade control structures in the creek would be very difficult to permit and construct (implementation) and would be very expensive.
49	Sheep Hollow Off-stream Storage Area	An off-stream area may provide for the detention of peak flood flows along Sycamore Creek. There may be potential to reduce flood risk by removing or notching the right bank levee to allow high water to flow into the right overbank area in the open space area located just south of the Chico Municipal Airport, behind the right bank levee of Sheep Hollow near the confluence with Sycamore Creek. This potential enhancement is strictly conceptual at this stage and further evaluation is needed to confirm its feasibility, and to evaluate whether or not the open space area is needed for interior drainage.	Low	No	Low	Medium	Initial	Why not grouped?	This project was not grouped because it is a well-defined, specific project.
50	Early Flood Warning System	Upstream gages to improve upon the availability and reliability of real-time flow data upstream along Big Chico Creek, allowing more lead time for local responders to prepare for and manage a high flow event. The warning system could include water level sensors and telemeters to transmit flood information so that any abnormally large inflows and/or issues with debris on the gate structures could be noticed immediately.	Yes	Yes, City of Chico	High	High	SWRP, combined into M, includes POEI*		
51	Identification and Evaluation of Groundwater Recharge	Groundwater recharge could help with water supply reliability, increase infiltration and provide treatment, and provide habitat (depending on how projects are implemented). The ability to recharge groundwater using various methods needs to be investigated.	Medium	Yes, City of Chico	Medium	Medium	SWRP, combined into P	Why affordability ranked as low?	Affordability is changed to medium.
52	Upper Watershed	-Ecosystem restoration -Improving groundwater recharge/storm water infiltration (i.e. wetland enhancement/creation) -Public education about watersheds, water systems and water quality. ***This project recommendation is the result of a collaborative brains	Medium	Yes, City of Chico	Low	Medium	SWRP, combined into M		
53	Urban Riparian Restoration	Community Creek Cleanups Annual Bidwell Park and Chico Creeks Cleanup (September) Regular neighborhood cleanups Invasive species removal (i.e. Arundo) in Little Chico Creek. Removal of anadromous fish migration blockages (i.e., rouge dams but	Yes	Yes, City of Chico	Medium	Medium	SWRP, combined into M, includes POEI*		
54	Big Chico Creek West of Nord Ave.	-Ecosystem restoration -Improving groundwater recharge/storm water infiltration (i.e. wetland enhancement/creation) -Public education about watersheds, water systems and water quality. ***This project recommendation is the result of a collaborative brain	Medium	Yes, City of Chico	Low	Medium	SWRP, combined into M, includes POEI*		
55	Erosion Management/Prevention	Upper Park Road erosion control/mitigation Biofilters before water enters creeks to reduce sediment in creek due to erosion from cyclists and runners on trails near the creeks. Identify and prioritize erosion hot spots to reduce sediments in creek	High	Yes, City of Chico	High	High	SWRP, combined into M, includes POEI*		
56	Diversion Channels	Utilize diversion channels for groundwater recharge/storm water infiltration. Biofilters before diversion channels drain to creeks (i.e. Little Chico creek diversion to Butte creek) Public education about watersheds, water systems and water quality.	High	No	Medium	Medium	SWRP, combined into P, includes POEI*	Why not grouped? Why not City sponsor?	This project has now been grouped into Project P, which is sponsored by the City.
57	Storm Water Detention Basins	-Major storm water basin restoration (i.e. Teichert Ponds Restoration Project - 2009) to mitigate polluted runoff that drains to the creeks. -Biofilters before water drains to waterways. -Public education about watersheds, water systems and water quality.	High	No	Medium	Medium	SWRP, combined into P, includes POEI*	Why not grouped? City sponsor?	This project has now been grouped into Project P, which is sponsored by the City.
58	Updating the City's storm water plan (to make it proactive)	Update the City's storm water master plan to make it proactive. This update would include developing computer models of the City's drainage system that are capable of modeling water quality. It would include evaluating drainage and flood control, implementation of low impact development, water quality best management practices, and would include programs like creek clean ups, water quality monitoring, and habitat enhancement, etc. It would include opportunities to use storm water for landscape irrigation or other uses. It should have a public education element too. A goal should be to address hydromodification from development.	High	Yes, City of Chico	Medium	High	SWRP, combined into P, includes POEI*	Affordability is low. PEOI?	Although this is a plan, a City-wide storm water master plan will be expensive to prepare. PEOI was added to the project.
59	Routine Community Creek Clean Up Project (Program)	This program includes organizing annual community creek clean up events. The events should include a morning of cleaning litter and trash from the creeks and associated wetland and riparian habitat. After the clean up there should be a community outreach and education event and barbecue.	High	Yes, City of Chico	Medium	High	SWRP, includes POEI*	Why grouped as separate SWRP project instead of combined like other projects w/ M (or P)? Affordability is Low.	The City currently funds this type of program, and keeping it as a separate program allows it to be evaluated independently of the many other elements that are included in the combined/grouped projects. Keeping it separate allows it to be funded separately from the other aspects of the combined/grouped projects. Affordability is medium because the project represents a reoccurring annual cost.
60	Fair Street Detention Ponds	Trash Interception at the Fair Street Detention Ponds including BD Ditch Repairs to reduce flooding	High	Yes, City of Chico	Medium	Medium	SWRP, combined into R, Trash Interception component combined into I, includes POEI*	Grouping w/O or R? Similar projects: 35, 43, 60	Project is already combined with Project R since Project R is specific to the Fair Street Detention Basin. Projects 43 is specific to the Fair Street Detention Basin, so it was also grouped into Project R. Project 35 includes several detention basins, is not specific to a single basin, and consequently was grouped into Project O which covers several detention basins.
61	Teichert Ponds Project	Improve the Teichert Ponds by removing non-native vegetation and improving the pond hydraulics and water quality.	High	Yes, City of Chico	Medium	Medium	SWRP, combined into Q, includes POEI*	Affordability and impemtability rankings, how were they evaluated?	The Implementability and Affordability ratings were evaluated relative to other projects. This project received medium ratings because it is for a specific site, but the specific improvements are not defined.
62	Meyers Industrial Park, Otterson Business Park	Trash collection at Meyers Industrial Park and Otterson Business Park to benefit Comanche Creek. Potential to combine this project with improvement of Comanche Creek bike lanes/paths.	High	Yes, City of Chico	Medium	Medium	SWRP, combined into O, includes POEI*	Why not O w/comanche detention basins?	The City-wide trash planning and implementation aspect of this project was changed to be combined into Project O. This Project involves planning and implementation of specific improvements at the Meyers Industrial Park and Otterson Business Park detention basins and therefore would fit into other projects currently being designed within the Comanche Creek watershed. The bike paths aspect of this project also fits into Project O.
63	Update the City's storm water policies and regulations	Update the City's development standards to clearly identify what water quality improvements and facilities are needed, how the improvements should be sized, what process is to be used for achieving approval of the storm water quality improvements and facilities by the City, and identification of storm water quality development impact fees. The project should also identify what the annual O&M costs are for the improvements and facilities, estimate the annual O&M costs, and identify a method like establishment of a water quality zone of benefit or community facilities district that results in monthly storm water fees being paid by new development. Additionally, regulations and policies for the existing City should be established or updated, and a funding mechanism for generating storm water funds from the existing City areas should be evaluated, hopefully leading to a secure O&M funding source.	High	Yes, City of Chico	Low	High	SWRP, combined into P	Affordability is low.	This project rating was changed to a low affordability because updating the City's storm water policies will be a very extensive update and will be a long process.

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64	Upper Park Road Improvements - Erosion Control	Improvement of Upper Bidwell Park Road to reduce erosion into Big Chico Creek and to improve access to Upper Bidwell Park.	High	Yes, City of Chico	Medium	Medium	SWRP, combined into M, includes POEI*		
65	Laxson South Bioswale	The proposed project will collect surface runoff from City streets and neighboring parking lots into a bioswale to be constructed at the N.E. corner of the Arts & Humanities building / S. Laxson Auditorium, where the campus meets the roundabout at W. 1st St. and Salem St. Currently, the area receives lots of runoff during moderate and heavy rainstorms, which creates flooding of sidewalks. The flooded areas are safety concerns, and the rainwater has nowhere to go but out into campus. This project would create improved drainage and catchment for surface runoff, allowing pollutants and fine particulates to settle before entering the storm drain system. The project will incorporate a bioswale and catchment system into campus to allow for infiltration and filtration of stormwater runoff. Existing City and Campus storm drain infrastructure will be improved and incorporated to direct water directly into the bioswale, rather than across sidewalks and into roadways. Shaping & grading of the site for collection of water, along with the installation of boulders, cobble and appropriate plant material will slow runoff velocity and allow for further infiltration and filtration.	Medium	Yes, CSU Chico	High	High	SWRP	Why not grouped under letter like other projets? Could also combine with Project 75 but 75. Why is affordability and impementability ranked as high?	This was kept as an individual project because it is a specific, well defined project. It was submitted and will be funded by CSU Chico. It is a relatively small project, resulting in a High Affordability. It will not require significant permitting or generate significant environmental impacts, resulting in a high Implementability.
66	Create Bioswales @ storm drain outfalls	Where there is room between the channel and the borders of the Greenbelt, pull back storm drain outfalls and install Bioswales, with spreading slabs and Energy dissipation before the channel, similar to what was done at Verbena Fields. This can also be done at locations such as Lost Park.	Medium	Yes, City of Chico	Low	Low	SWRP, combined into P, includes POEI*	Implementability is High. Why P instead of M? Could go with grassy swale project and Bidwell Park projects (71, 19).	This project includes bioswales along all streams where land forms allow, and does not a specify location(s). Implementing this project effectively requires preparation of a plan to determine bioswale locations and the appropriate sequence for implementing the bioswales. Preparing the plan and implementing bioswales everywhere that land form allows will be very expensive. Implementability is low because the planning will require time and the implementation of many bioswales will require several permits to be acquired from the CDFW, the USACE, and the RWQCB. This project was included with Project P because both this project and Project P are City-wide projects, whereas Project M is specific to Big Chico Creek. Projects 19 and 71 are specific to Bidwell Park, and this is a City-wide project.
67	Teichert Ponds cleansing wetland	Convert some portion of the first pond and the adjacent area to a cleanable settling and trash removing basin and a constructed wetland to absorb toxins and sediment and to be removed periodically.	High	Yes, City of Chico	Low	Low	SWRP, combined into Q, includes POEI*	Affordability and impemtability rankings, how were they evaluated?	The Implementability and Affordability ratings were evaluated relative to other projects. These ratings are now changed to low because the construction aspects of this project will be expensive and will require several permits to be acquired from the CDFW, the USACE, and/or the RWQCB.
68	Create Hydrologic Floodplains on streams	Along streams small floodplains can be constructed and vegetated with natives, as Streaminders has done in the past. Such opportunities exist along E. Lindo Ave. behind Diamond nut and upstream almost to Mangrove.	Medium	Yes, City of Chico	Medium	Medium	SWRP, combined with 16, includes POEI*		
69	Multiple Off-Stream Detention/Wetland Basins	Create channel(s) to intercept peak flows in large basins to mitigate flood risk and erosion as well as enhance recharge and create wetland for wildlife and public enjoyment.	High	Yes, City of Chico	Medium	Low	SWRP, combined into N, includes POEI*		
70	Lindo Channel Stormwater Infiltration and Floodplain Enhancement Project	Work with City to develop a plan to prioritize exact locations for channel improvements (city-owned properties and right-of-ways) and storm drain system improvements (outfall repairs, outfall setbacks w/bioswales, trash reduction structures at outfalls, and inlet filters). it is also intended to build on the efforts of previous floodplain improvement and stormwater protection grant projects awarded to the City (Prop. 84, DROPS, Verbena/Bidwell Ave., CUSA) and CUSD (DROPS), including continuing stormwater education, LID Implementation efforts, and citizen monitoring efforts tracking long-term effects of stormwater management efforts on improving habitat and water quality. See attachment for more details.	Yes	Yes, City of Chico	Medium	Low	SWRP, combined into M, includes POEI*	Affordability is Medium or could be low depending on site location. PROJECT has POEI	Affordability is changed to medium and Implementability is changed to low because project includes construction in the stream channel, which will require several permits to be acquired from the CDFW, the USACE, and the RWQCB. Project includes general goals, but includes only a few specific project locations. The project includes six suggested project elements with sub elements. These project elements are general and lack specific locations. Many of the project elements will require several permits to be acquired from the CDFW, the USACE, and the RWQCB. Many of the project elements will be expensive to implement. POEI is now added to this project. Because the project is so general and many of the projects elements will be hard to implement and willb be expensive. The project elements include: 1) Floodplain restoration a) Hydrologic: reconnect stream to the floodplain and restore natural hydrology; b) Vegetative: remove invasive species (include herbicide treatment) and replant native plants; c) Habitat Restoration: reduce bank erosion, improve wildlife habitat, expand width of riparian buffer, strategic grading in channel to form "low flow" channel meander to reduce isolated pools trapping native fish species and nutrients. 2) Enhance storm drain system a) Repair damaged outfalls: replace broken conduit, repair pipe seams and gates, stabilize erosion surrounding outfalls b) Add bioswale areas below outfalls: set outfalls back away from stream banks, realign to allow expanded infiltration areas c) Re-grade / realign outfalls: to enhance drainage (some outfalls "trap" runoff for long periods of time (weeks/months), accumulating nutrients and pollutants carried to receiving waters during subsequent rain events. d) Install trash reduction structures: target "hot spots" (Mangrove to Esplanade), install inlet filters, trash racks, debris cages. 3) Reduce homeless encampments- a) Increase surveillance b) Schedule regular creek clean-ups c) Develop strategy to reduce homeless encampments 4) Reduce urban landscape irrigation runoff- a) Provide public education: LID implementation/water conservation and training (target voluntary residential implementation) b) Clean Water Business Partners: target education and incentive program for businesses located where inlets carry runoff to Lindo Channel (Chico Nut, S&S, Lifescapes, In-Motion Fitness, Nissan, Holiday Inn, Dennys, etc.) and others where inlets carry water to Lindo Channel. 5) Enhance Recreational Opportunities - a) Improve Trails, Bike Paths and Transportation Pathways: Improve existing access points (Manzanita, Madrone, Esplanade, Sheridan, Holly, Esplanade, etc. where rogue trails and access pathways cause erosion) b) Improve picnic and sitting areas: Verbena Fields, Madrone, bike path under freeway (cul-de-sacs could allow expanded access). 6) Project Effectiveness Monitoring - a) Utilize existing citizen monitoring program to track project effectiveness including water quality and habitat improvements b) Pre- and post-project trash surveys c) Pre- and post-project outfall surveys
71	Bidwell Park Stormwater Management Project (Green Infrastructure-LIDs, Floodplain Improvement, and Ground Water Recharge)	Project will implement LID practices designed to improve the capacity of natural drainage areas to infiltrate and treat stormwater runoff throughout Bidwell Park, including green Infrastructure-LIDs, floodplain improvement, and ground water recharge. See attachment for more details.	High	Yes, City of Chico	Low	Medium	SWRP, Project 71 is now combined with Project 26, and both projects are combined into Project P, includes POEI*	Implementability is High. Prop 84 grant had similar project-low cost, no environmental permits needed.	The project includes 18 suggested project elements. These project elements are general and lack specific locations. Many of the project elements will require several permits to be acquired from the CDFW, the USACE, and the RWQCB and approval from the Bidwell Park and Playground Commission. Many of the project elements will be very expensive to implement. Because the project is so general and many of the projects elements will be hard to implement and expensive. Affordability was rated low and Implementability was rated medium.
72	Revised Chapman/Mulberry Neighborhood Green Infrastructure and Natural Stormwater Treatment Project	Convert impervious areas into vegetated plots that soak up rainwater to limit urban runoff from entering creeks in disadvantaged communities. See attachment for more details.	Medium	Yes, City of Chico	Medium	Medium	SWRP, combined into N, includes POEI*	Implementability is High Affordability is High. Targets DACs, which loweres match. Also could be combined with other Mulberry SWRP project.	This project is general in nature. The project does identify some specific locations as part of a list of many project locations ("Implement LID demonstration projects targeting Chapman Mulberry neighborhood, the Dorothy Johnson Center, Humboldt Park, Torres and Jesus Center homeless shelters, Chapman Elementary (and 8 other Title I schools), and other City owned properties"). Identifying the best and most cost effective locations will require preparation of a plan to identify and priortize the locations. Many of the project elements will be expensive to implement (e.g. day-lighting storm drains through bioswales and pervious piping, outfall setbacks away from creek banks, roadway curb cuts to vegetated plots and infiltration trenches, pervious sidewalks and gutter pans, downspout disconnects to cisterns for recycling and use by community gardens, integrate safe walking and biking transportation pathways into LID project designs, etc). Because the project is so general and many of the projects elements will be hard to implement and expensive, Affordability was rated medium and Implementability was rated medium. The project objectives include: - Integrate LID practices into Chapman Mulberry Neighborhood - Reduce stormwater volume and pollutant loading - Conduct public outreach and training - Target implementation of LID demonstration projects on City-owned properties within DACs - Link existing citizen monitoring and stormwater / watershed protection efforts with City Stormwater Management Program - Implement LID demonstration projects - Implement vegetation management (Arrundo, Broom, etc.) in waterways - Implement trash reduction programs - Implement Green Jobs in Your Community Training Program - Implement a Stormwater Outreach and Education Plan This project was not combined with Project 85 because Project 85 is a well defined, specific project that can be evaluated as a stand-alone implementation project.

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73	Bidwell/Grape Ave Stormwater Protection and Restoration Project	Implement green infrastructure, remove invasive plants, plant native species, bioswales for ground water recharge, stream bank stabilization and reduce bank erosion, restore floodplain functions, and implement green jobs training. See attachment for more details.	High	Yes, Grape Way Agricultural Farm. Brendon Smith, 916-471-0311	Medium	High	SWRP	Implementability is High.	Implementability was changed to high bacause some elements are highly implementable (like Implement a Stormwater Outreach and Education Plan and Creek clean-up at mouth of Big Chico Creek near canoe launch and CA State Park access). However, many elements of the project will be very difficult to implement, like: -Retrofit sections of storm drain conduit with pervious pipe; install bioswales below outfalls (consider realigning piping system to allow longer path of infiltration) and setback/daylight discharge points away from creek edge; repair damaged outfalls (broken conduit, control gates, housing, undercut banks and erosion around housing); install trash reduction structures and filters at inlets and outlets (below Nord Avenue) - Reduce bank erosion. Repair and stabilize creek banks along Big Chico Creek below Nord Avenue and near Grape Way causing erosion and sedimentation. - Enhance ground water recharge. Install setback levees, and bioswales to increase recharge (target Ag properties near Grape Way, and where houses are falling into creek along Bidwell Avenue) - Improve and restore floodplain functions. a) Hydrologic: reconnect stream to the floodplain and restore natural hydrology; b) Vegetative: remove invasive species and replant native plant communities appropriate to the site and condition. Please be aware that sponsorship entails a commitment by the sponsoring agency/organization of the needed capital funds and operations and maintenance funds. The sponsoring agency or organization may be asked to provide evidence of ability to fund the project or a fair share of the project if this project is grouped with other projects.
74	(Revised) Cal Park Green Streets Project	Convert impervious areas into vegetated plots that soak up rainwater in Cal Park. See attachment for more details.	Medium	Yes, City of Chico	Medium	Medium	SWRP, combined into N, includes POEI*	Why N instead of P or M? Why not combine w/project 20?	This project was grouped with Project N because they have many aspects in common, and both projects are targeted at Little Chico Creek. Project P is a City-wide project. Project M is targeted at Big Chico Creek. This project was not grouped with Project 20 because Project 20 includes only green streets and parking lots. This projects includes many more types of project and programs, including: - Develop and implement a Citywide/Countywide LID Design and BMP Manual - Downspout disconnects to cisterns for recycling and use by community gardens -Implement vegetation management (remove turf and invasive plants and plant natives) - Implement Chico Trash Reduction program - Implement Green Jobs in Your Community Training Program - Implement a Stormwater Outreach and Education Plan
75	Revised Chico State University LID Implementation and Stream Habitat Enhancement Project	Implement green infrastructure, remove invasive plants, plan native species, bioswales for stormwater treatment, stream bank stabilization and reduce bank erosion, restore floodplain functions, improve walking and biking trails, implement green jobs training, trash reduction structures, outreach and education. See attachment for more details.	High	Yes, Stream Team	Low	Medium	SWRP, combined into M, includes POEI*	Why not grouped so it is included as a SWRP project? Spoonsor is yes (ST), and when I talked w/ CSU Chico they were interested in collaborating. invasive species remioval and bank enhacement projects can be implemented by public, ST, and students. Implementability is High. Affordability is low. Could commbine w/Project 65 or group 65 and 75 under letter M. Includes PEOI.	The CSU Chico TAC member indicated they were going to sponsor Project 65 and would not sponsor this project. Sponsorship was changed to Stream Team. This project description fits the goals of Project M (Big Chico Creek 21st Century Management Plan), so it was changed to be combined into Project M.
76	Revised Little Chico Creek, Lindo Channel, Mud/Rock Creek Arundo/Broom Removal and LID Implementation Project	Removing invasive plants, installing natives, removing debris and deposition. See attachment for additional project details.	Medium	Yes, Stream Team	Medium	Medium	SWRP, combined into M and N	Why is this not grouped under SWRP letter (M, N)r? Sponsor is yes (Stream Team). Affordability is low or medium. Implementability is Hish.	The orignal project submittal listed the City and County as potential sponsors; but, no definite sponsors were identified. The sponsorship has now been changed to Stream Team. Affordability is now changed to medium because the project will include construction in creeks. Some project elements will require several permits to be acquired from the CDFW, the USACE, and the RWQCB. This project is now combined into Projects M and N.
77	Revised Low Impact Development and Green Infrastructure Implementation Program for Butte County Schools	Project features a long term approach for integrating LID practices into present and future maintenance and landscape design standards to assist the CUSD and BCOE schools in meeting existing storm water management goals. In addition, the Project will integrate a cohesive storm water educational program, targeting after-school programs.	High	Yes, Chico Unified School District	High	High	SWRP, includes POEI*	Affordability is Low (grant match available and targets DACs w/lowered match requirements). Implementability is High	Affordability has been changed to high. High Affordability means the project is more affordable than low affordablity. Implementability has been changed to high.
78	Revised Urban Landscape Water Conservation and Pesticide Reduction Project	Project features developing a City wide LID design and BMP Manual, implementing demo LID projects, riparian vegetation management, trash reduction program, develop green jobs training, develop water wise and habitat guide, rain-scapes reward program. See attachment for more details.	High	Yes, Stream Team	Low	High	SWRP, combined into P, includes POEI*	Sponsor is yes (Stream Team). Affordability is low. Implementability is High. Why not grouped under letter as you did with other projects? Could be listed with each separate watershed grouping ore choose M. Also has PEOI.	The sponsorhisp has been changed to Stream Team. This project has now been combined into Project P, is now a SWRP project, and POEI has been added. Affordability is low and Implementability is changed to high. Affordability is changed to low because the project has many elements and action needed to implement the elements will have to be determined and the elements will have to be priortized.
79	Revised Five Mile, Lindo Channel, and Sycamore Flood Diversion Stormwater Treatment and Habitat Enhancement Project	This Project will also enhance natural habits and wildlife corridors, and improve the function of an existing flood diversion system in need of repair to include fully functioning USGS gages, and telemetry. See attachment for more details	High	Yes, City of Chico	Medium	Medium	SWRP, combined into M		
80	Revised City of Chico Long-term Trash Reduction Project	Establish a long-term trash reduction program to achieve outcomes to meet State Trash TMDL and MS4 permit requirements. See attachment for more details	High	No	Low	Medium	Initial	Why grouped under I instead of M, N, O, Q? Affordability is Low. Implementabilty is High. Includes PEOI. Project elements are mostly incentive and educational and not trash structures: landfill coupons, curbside pick-up of large household items, prescription drugs and hazardous household waste recycling, free yard waste drop off, compost green-waste on-site campaigns, creek clean-ups, monitoring trash levels.	The City has selected Track 1 as their method for meeting the Trash Amendments, and therefore, many of these measures will not be needed to meet the State's Trash Amendment requirements. Projects M, N, O, and Q may include trash capture as an element within those projects, but trash capture is not the focus of those projects. Affordability has been changed to low. Implementability remains medium because the project has many elements, the actions needed to implement the elements will have to be determined, and the elements will have to be priortized.
81	Revised Chico Green Streets and Low Impact Development Implementation Project	The proposed Project features a long-term approach for integrating LID practices into present and future development design standards to assist the City in meeting State-mandated Municipal Stormwater Permit (MS4) requirements. See attachment for details	High	Yes, City of Chico	Low	High	SWRP, combined into P, includes POEI*	Why grouped as P (plan) instead of M and Q? Implementability is High. Implementation project not plan (LID demos, green streets, veg management, trash reduction activities). Includes POEI	This project was grouped with P because this project is a City-wide project. Project M is specific to Big Chico Creek. Project Q is specific to Teichert Ponds. Implementability was changed to high.
82	The Stream Team NSV IRWM Projects	Continue existing efforts of The Stream Team to educate and engage community members on how to monitor water quality in local watersheds. See attachment for details. Existing Projects - K-12 Watershed Education and Science Ambassador Program - Regional K-12 Watershed Education - North Sac. Valley Regional Water Quality Assessment Project 2016 list - Drought Response and Outreach Program For Schools including LID Implementation Projects - North Sac. Valley Regional Water Quality Assessment and Education Project	High	Yes, Stream Team	High	Low	SWRP, combined into P, includes POEI*	Why not grouped under SWRP letter? Choose M, N. Includes PEOI. Affordability is low, and Implementability is High. Sponsor is yes (Stream Team).	This project includes City-wide education and outreach activities. Consequently, this project has now been grouped into Project P, which covers City-wide activities. Projects M and N are watershed specific projects, so this project was not grouped under either Project M or N. Affordability has been changed to high. High affordability means the project is more affordable than low affordability. The sponsorship has been changed to Stream Team.

Table 1. Comments and Responses on the Intial Project Screening

Project Number or Letter	Title of Recommended Project	Project Description	Publicly Owned Land Evaluation (High, Medium, Low)	Project Sponsor Evaluation* (Yes, No)	Estimated Affordability Evaluation High, Medium, Low	Implementability Evaluation (High, Medium, Low)	Evaluate as a SWRP Project or Retain as an Initial Project (note A) (SWRP or Initial)	Comments Received from Stream Team	Response to Comment
83	Teichert Pond Water Quality Improvement Project	Implement trash reduction outreach campaign, trash and water quality surveys, install trash reduction structures in the inlets and outlets associated with Teichert Pond, initiate invasive plant removal projects and replant appropriate natives, initiate a homeless encampment reduction plan, collaborate with existing citizen monitoring to track project effectiveness and to provide related public stormwater education and outreach (target DACs, schools, businesses contributing runoff to Teichert Pond), green job training to assist with project implementation, develop outreach and education plan with roles for interested community organizations, connect bike path, initiate outdoor classroom curriculum linked with project objectives, LID implementation and green streets retrofit to reduce runoff carried to pond, improve wildlife and riparian habitat, recreation opportunities, picnic areas, walking/biking paths, informational signage, etc.	High	Yes, City of Chico	Low	Medium	SWRP, combined into Q, Trash reduction structures combined into I, includes POEI*	Implementability is High. Citizen monitoring program w/equipment and trained volunteers to conduct monitoring. Includes PEOI.	Implementability remains low because 1) this project includes elements that will require several permits to be acquired from the CDFW, the USACE, and the RWQCB (including installing trash reduction structures in the inlets and outlets associated with Teichert Pond), 2) some project elements are general and lack specific loctions (LID implementation and green streets retrofit to reduce runoff carried to pond). Many of the project elements will be expensive to implement. Citizens can conduct some elements of the project (monitoring), but citizens will not be able to conduct many elements of the project, incluiding: install trash reduction structures in the inlets and outlets, initiate a homeless encampment reduction plan, connect bike path, LID implementation and green streets retrofit, walking/biking paths. The project is already listed with POEI.
84	Comanche Creek Flood Control Study	The proposed project is to develop and implement a multifaceted, holistic program to manage the flood protection system along Comanche Creek from the Little Chico Creek Diversion Channel to Dayton Road. The goals of the project would be to: - Ensure the integrity of the flood control system. - Assess existing runoff flows and mitigate for increased flows due to development - Fully assess the system using modern analysis techniques and increased data, and ensure that the system can protect the urban and agricultural areas while considering possible climatic changes. - Identify improvements required to achieve FEMA certification. - Coordinate with the Bicycle Plan. - Optimize recreational opportunities. - Identify opportunities to enhance riparian habitat.	Medium	Yes, City of Chico	High	High	SWRP, combined into O		
85	Chapman Mulberry Rain Garden	This project benefits Little Chico Creek by intercepting nonpoint pollution and infiltrating it in basins mulched with appropriate species of fungus for mycoremediation. This project hopes to be an anchor project by beautifying the open space (052 zoned) for residents nearby, as well as serve as a demo garden for water-wise Native landscaping.	High	Yes, Earthshed Solutions	High	High	SWRP	Why grouped as stand alone SWRP instead of grouped under a letter like other projects? Could combine with project 72 (project proponants are willing to collaborate).	This project was grouped as a stand-alone project because it is a well defined specific project. In contrast, Project 72 incudes many diverse, general elements. The project sponsor should be aware that sponsorship entails a commitment by the sponsoring agency/organization of the needed capital funds and operations and maintenance funds. The sponsoring agency or organization may be asked to provide evidence of ability to fund the project or a fair share of the project if this project is grouped with other projects.
Consolidated/Grouped Projects									
A	Big Chico Creek and Mud Creek Watershed Wide Flood Control, Urban Drainage, Habitat, Public Open Space/Recreation Management Plan	The proposed project is to develop and implement a multifaceted, holistic program to manage the flood protection system of diversions and levees from Five Mile Recreation Area in Chico to the Sacramento River. The goals of the project would be to: - Ensure the integrity of the flood control system. - Fully assess the system using modern analysis techniques and increased data, and assure that the system can protect the urban area while considering possible climatic changes. - Manage gravel deposition at Five Mile and assure proper gravel migration downstream. - Develop management strategies that maximize benefits to salmon populations. - Coordinate with the Bicycle Plan. - Optimize recreational opportunities. - Identify opportunities to enhance riparian and wetland habitat, with an emphasis on endangered species such as the Sacramento Valley Long-horned Beetle. - Ensure system provides 200-yr level of protection per State regulations. - Maximize the use of County Service Area 24 funds. - Include LID where feasible. - Identify and correct erosion problems. - Install flow gages throughout creek (particularly in the upper watershed) to improve upon the availability and reliability of real-time flow data allowing more lead time for local responders to prepare for and manage a high flow event. The warning system could include water level sensors and telemeters to transmit flood information so that any abnormally large inflows and/or issues with debris on the gate structures would generate a alarm.	Medium	Yes, City of Chico	Medium	High	SWRP, combined into M	Why wasn't this grouped? Why not City sponsor? Affordability is low (plan).	This project is similar to Project M. However, Project M was preferred over this project. Nevertheless, this project has now been grouped with Project M. Publicly-owned land was changed to medium. Although this is a plan, preparing this plan would be expensive, so Affordability was ranked as medium. Sponsorship was changed to Yes, City of Chico.
B	Little Chico Creek Watershed Wide Flood Control, Urban Drainage, Habitat, Public Open Space/Recreation Management Plan	The proposed project is to develop and implement a multifaceted, holistic program to manage the flood protection system of diversions and levees from Little Chico Creek to Butte Creek. The goals of the project would be to: - Ensure the integrity of the flood control system. - Fully assess the system using modern analysis techniques and increased data, and assure that the system can protect the urban area while considering possible climatic changes. - Identify improvements required to achieve FEMA certification. - Coordinate with the Bicycle Plan. - Optimize recreational opportunities. - Identify opportunities to enhance riparian habitat, with an emphasis on endangered species such as the Sacramento Valley Long-horned Beetle. - Ensure system provides 200-yr level of protection per State regulations. - Include LID where feasible. - Identify and correct erosion problems. - Install flow gages throughout creek (particularly in the upper watershed) to improve upon the availability and reliability of real-time flow data allowing more lead time for local responders to prepare for and manage a high flow event. The warning system could include water level sensors and telemeters to transmit flood information so that any abnormally large inflows and/or issues with debris on the gate structures would generate a alarm.	Medium	Yes, City of Chico	Medium	High	SWRP, combined into N, includes POEI*	Why wasn't this grouped? Why not City sponsor?	This project is similar to Project N. However, Project N was preferred over this project. Nevertheless, this project has now been grouped with Project N. Publicly-owned land was changed to medium. Although this is a plan, preparing this plan would be expensive, so Affordability was ranked as medium. Sponsorship was changed to Yes, City of Chico.
C	Teichert Ponds	Update the Teichert Ponds Restoration Project Plan to evaluation and potential implementation of: - Reduction of homeless impacts to the ponds - Vegetation management - Erosion repairs - Trash Capture, suspended solids capture, water quality treatment of inflows - Reconstruct the outlet to be able to manage releases - Reroute the small east side storm drains so that they don't dump directly into Pond 1. - Remove the silt buildup in the ponds and its associated contaminants. - Separate Pond 1 (freshwater) from Ponds 2-3 and rework Ponds 2 and 3 so that Pond 2 can be periodically drained and cleaned. - Work with the Butte County Mosquito and Vector Control District to develop a plan that will reduce the need for mosquito control. - Remove the major invasive plant species: parrot's feather, tree of heaven, Himalayan blackberry, Chinese tallow tree, pyracantha and arundo (1-2 small stands). - The dirt roadway on the north side floods almost every winter. Solve this problem. - Finish removing the chain link fencing around Pond 1 to improve access for invasive plant control and trash cleanup. - Construct a walking trail on the east side of the Ponds to improve public access and reduce undesirable behavior (camping, encroachments by east side neighbors, yard waste dumping). Homeless camping is a major problem here; however, most of the camps are outside of the storm water area so they don 't directly affect the amount of trash going into Little Chico Creek. - Improve trash filtering on major east side storm water inlet and add filter on south inlet.	High	Yes, City of Chico	Medium	High	SWRP, combined into Q	Why is affordability and implementability evaluated differently? Some of the elements (veg removal) seem like affordability would be high. Why not City as sponsor?	Affordability and Implementability evaluate different items, and do not not necessarily have the same rating. Some elements of this project are more affordable than others, but the affordability rating evalutes the project as a whole. All the Teichert Pond projects were combined into Project Q, Project Q is sponsored by the City. Nevertheless, Sponsorship for this project is now changed to Yes, City of Chico. Implementability for this project was already ranked as high.
D	Creek Bank and Bed Stabilization Plan and Specific Projects, including:	Develop a Creek Bank and Bed Stabilization Plan and specific projects, including: - Left bank downstream of the Chestnut St. Bridge - Upper Bidwell Park road where runners and bicyclists cause erosion - Lindo channel pools	Low	Yes, City of Chico	Medium	High	SWRP, combined into M and N	Why wasn't this grouped? Why not City sponsor?	This grouped project is focused on identifying and repairing erosion problems. Grouped Project M includes this goal for Big Chico Creek and Mud Creek. Grouped Project N includes this goal for Little Chico Creek. Consequently this grouped project is now grouped with Projects M and N. Sponsorship is now changed to Yes, City of Chico.
E	Homeless Camping Reduction Program	Develop a program (or continue and improve current efforts) to help reduce storm water impacts from homeless encampment along creek, detention basins, bridges, and other areas where water quality is impacted.	Medium	Yes, City of Chico	Medium	Medium	SWRP, combined into M, N, O, P, and Q	Why not grouped? Implementability is High (plan). Why is publicly owned land not yes or no?	This grouped project is focused on homeless camping reduction and includes all elements of other projects related to homeless impact reduction. Implementability was rated as medium because homelessness is a complex problem and will be difficult to resolve. Publicly owned land is now changed to medium. This project is now combined into M, N, O, P, and Q.
F	Storm Water Public Outreach, Education, and Involvement Program	Modify the City's existing outreach program to include storm water education, LID/BMP education, trash clean up events. Include activities that engage and involve the public in storm water events.	High	Yes, City of Chico	Medium	High	SWRP, combined into P, includes POEI*	Why not grouped? Why not City sponsor? PEOI.	This grouped project is focused on Public Outreach, Education, and Involvement. Grouped Project P includes this goal and associated programs. Consequently, this grouped project is now grouped with Project P. Sponsorship is now changed to Yes, City of Chico.

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G	Storm Water Monitoring for compliance with MS4 permit	Continue the City's storm water monitoring activities as needed to meet the requirements of the MS4 permit.	High	Yes, City of Chico	High	High	SWRP	Why not grouped under a letter? Why stand alone SWRP project? Why Yes instead of High for public land? Affordability is low/medium (based on current monitoring requirements). How were costs ranked (<$50K-low, > $100K-high, etc.)? Implementability is High (QAPP /MP exists, and citizen monitoring program w/equipment and trained monitors).	This project is a stand-alone project because it entails monitoring that is necessary for the City MS4 permit compliance. This project is currently funded and is ongoing. Consequently, grouping this project with other projects is not necessary. The Publicly Owned Land evaluation was changed to High. This on-going program is very affordable in comparison to other projects. The affordability rating is based on a qualitative assessment of the cost of the project or program relative to the other projects or programs.
H	Low Impact Development and Water Quality Best Management Practices Management Plan and Specific Projects	Develop a Low Impact Development and Water Quality Best Management Practices Management Plan and Implement Specific Projects, including: - Hagen Lane Business Park outlet filtering - Valine outlet filtering - Wrex outlet filtering - Midway Bridge northwest outlet filtering - RDA property north of the Boucher St. Bridge for storm water infiltration - Bidwell Park Enhancements - Green street and parking lot retrofits - City and County Corp. Yard retrofits - Demonstration projects for public - City of Chico LID and BMP Design Manual - Target LID to disadvantaged communities The program would identify specific LID projects and activities to be implements over a 25-year time period using a rational approach that provides the greatest potential benefits and is affordable and fundable by the City.	Medium	Yes, City of Chico	Low	Medium	SWRP, combined into P, includes POEI*	Why not grouped? Sponsor is City. Affordability is low. Implementability is High. Public land-yes or no?	Grouped Project P includes this project's goals and associated program. Consequently, this grouped project is not needed. However, because this project lists several specific projects, this project is now grouped with Project P and the sponsor is the City of Chico. Implementability is medium because this project includes development of a plan of how to implement LID over the next 25 year. Some of the LID projects will likely be difficult to implement. The Publicly Owned Land rating was changed to medium because some of the LID project may be on private property.
I	Trash Reduction Master Plan and Specific Projects, including:	Implement specific trash capture projects at Teichert ponds, Fair Street Detention Basin, and Meyers and Otterson Industrial Parks Develop a Trash Reduction Master Plan and Specific Projects: The master plan would identify specific trash reduction projects and activities to be implemented over a 20-year time period that meets the requirements of the Trash Amendments and uses a rational approach that provides the greatest potential benefits and is affordable and fundable by the City.	Medium	Yes, City of Chico	Low	Medium	SWRP, includes POEI*	Why listed as stand alone SWRP instead of grouped under letter I? Why is affordability ranked low for some trash projects and high for others?	This project is not grouped with Project I because this project is Project I. The three projects that are focused primarily on trash capture include Projects 23, 80, and I. Affordability is ranked as low for all three of these projects. There are other project that inlcude trash capture as an element of the project, and affordability for those projects was evaluated for the project as a whole, not specifically for the trash capture element of the project.
J	Detention Basin Implementation and Modification Plan	Develop a Detention Basin Implementation and Modification Plan and specific projects including: - Fair Street Detention Basin	Medium	Yes, City of Chico	Low	Medium	SWRP, combined into O, N, R, includes POEI*	Why not grouped with other detention basisn projects? Implementability is High (plan).	The other detention basin projects were grouped as follows: - Project O covering Comanche Creek includes detention basin projects 17, 35, and 62. - Project N covering Little Chico Creek includes detention basin projects 18 and 69. - Project R covering just the Fair Street Detention Basin includes projects 43 and 60. Consequently, this project covering the detention basins as a group is now grouped with these other projects as appropriate. Sponsorship was change to Yes, City of Chico. Implementability for this project was rated as medium because a study will be needed to determine the specific improvements needed at each basin and to priortize the improvements.
K	Habitat Improvement Plan and Specific Projects	Develop a Habitat Improvement Plan and Specific Projects, including: - Remove invasive yellow flag iris from Comanche Creek - Arundo removal from Little Chico Creek (develop a management plan and conduct removal projects) - Restoration projects in the upper watershed - Restoration projects in the City	Medium	Yes, City of Chico	Low	Medium	SWRP, combined into M and N	Why not grouped? Implementability is High (plan). Why is publicly owned land not yes or no?	The goals and project elements from this project were included in Projects M and N. Consequenlty, this project is now grouped with Projects M and N. Sponsorship has been changed to Yes, City of Chico. The Publicly Owned Land rating was change to medium.
L	Energy Conservation and Greenhouse Gas Reduction Program	Develop a program to help reduce energy use and greenhouse gas production. Also includes sequestering greenhouse gases through tree planting and other means.	Medium	No	Low	Medium	Initial	Why not grouped? Implementability is High (plan). Why is publicly owned land not yes or no?	Energy conservation and greenhouse gas reduction represent a program that is much larger than just stormwater. Consequently, it would be better for this program to be implemented by another City department, by the County, by the State of California, or by the Federal Government. Therefore, this project was not sponsored by the City, and remains an Initial Project. The Publicly Owned Land rating was change to medium.
M	Big Chico Creek 21st Century Management	The proposed project is to develop and implement a multifaceted, holistic program to manage the flood protection system of diversions and levees from Five Mile Recreation Area in Chico to the Sacramento River. The goals of the project would be to: - Ensure the integrity of the flood control system: Fully assess the system using modern analysis techniques and increased data, and assure that the system can protect the urban area while considering possible climatic changes; review settings of diversion structures. Balance flows to decrease scour, improve flood protection, and improve habitat; Ensure system provides 200-yr level of protection per State regulations; Evaluate expanding floodplain; Install flow gages, water level sensors, and telemeters to transmit flood information so that any abnormally large inflows and/or issues with debris on the gate structures would generate an alarm. - Optimize recreational opportunities; Coordinate with the Bicycle Plan; i.e. complete the planned bike path along the Bypass to connect to the Floral Ave bike path - Maximize the use of County Service Area 24 funds. - Include LID where feasible: Improve GW recharge and stormwater infiltration in upper watershed, Infiltration in Lindo Channel, Bidwell Park SW Management: Infiltration, grassy swales, - Identify and correct erosion problems: Biofilters before water enters creeks to reduce sediment in creek due to erosion from cyclists and runners; Improve Upper Bidwell Park Road to reduce erosion in BCC and improve access to the Park; Erosion at Hooker Oak Park - Detention Basins: Create detention area in Lower Bidwell Park just west of the east most parking area off Peterson Memorial Drive; Create small detention basin on the right (north) bank of BCC just downstream of the Vallombrosa Bridge (part of the city-owned Lost Park area). - Restore ecosystem: Manage gravel and sediment deposition at Five Mile and assure proper gravel migration downstream; Community Creek cleanups; invasive species removal; removal of fish migration blockages; Identify opportunities to enhance riparian and wetland habitat, with an emphasis on endangered species such as the Sacramento Valley Long-horned Beetle. Remove invasive plants, install native plants, and remove debris and deposition. -Develop a program (or continue and improve current efforts) to help reduce storm water impacts from homeless encampment along creek, detention basins, bridges, and other areas where water quality is impacted.	Medium	Yes, City of Chico Yes, Stream Team	Medium	High	SWRP, includes POEI*	Why grouped as stand alone SWRP project instead of grouped under a letter (M, etc.)? How were affordability and implementability rankings determined?	This project is not a stand-alone project, it is a grouped project. This project was not grouped with Project M because this project is Project M. Because this project constitutes a large planning/study project, it was rated as medium for affordability and high for implementability.

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N	Little Chico Creek 21st Century Management	The proposed project is to develop and implement a multifaceted, holistic program to manage the flood protection system of diversions and levees from Little Chico Creek to Butte Creek. The goals of the project would be to: - Ensure the integrity of the flood control system. - Recalibrate LCC diversions into Butte Creek - Fully assess the system using modern analysis techniques and increased data, and assure that the system can protect the urban area while considering possible climatic changes. - Identify improvements required to achieve FEMA certification. - Coordinate with the Bicycle Plan. - Optimize recreational opportunities. - Identify opportunities to enhance riparian habitat, with an emphasis on endangered species such as the Sacramento Valley Long-horned Beetle. - Ensure system provides 200-yr level of protection per State regulations. - Include LID where feasible. - Evaluate City corp yards - Evaluate Chaptman/Mulberry neighborhoods - Cal Park Green Streets - Identify and correct erosion problems. - Install flow gages throughout creek (particularly in the upper watershed) to improve upon the availability and reliability of real-time flow data allowing more lead time for local responders to prepare for and manage a high flow event. The warning system could include water level sensors and telemeters to transmit flood information so that any abnormally large inflows and/or issues with debris on the gate structures would generate a alarm. - Create channel(s) to intercept peak flows in large basins to mitigate flood risk and erosion as well as enhance recharge and create wetland for wildlife and public enjoyment. -Develop a program (or continue and improve current efforts) to help reduce storm water impacts from homeless encampment along creek, detention basins, bridges, and other areas where water quality is impacted.	Medium	Yes, City of Chico Yes, Stream Team	Medium	High	SWRP	Why grouped as stand alone SWRP project instead of grouped under a letter (M, etc.)? How were affordability and implementability rankings determined?	This project is not a stand-alone project, it is a grouped project. This project was not grouped with Project M because this project is related to Little Chico Creek and Project M is related to Big Chico Creek. Because this project constitutes a large planning/study project, it was rated as medium for affordability and high for implementability.
O	Comanche Creek Management Program	- The proposed project is to develop and implement a multifaceted, holistic program to manage the flood protection system along Comanche Creek from the Little Chico Creek Diversion Channel to Dayton Road. The goals of the project would be to: - Ensure the integrity of the flood control system. - Assess existing runoff flows and mitigate for increased flows due to development - Fully assess the system using modern analysis techniques and increased data, and ensure that the system can protect the urban and agricultural areas while considering possible climatic changes. - Identify improvements required to achieve FEMA certification. - Optimize recreational opportunities and Coordinate with the Bicycle Plan. - Identify opportunities to enhance riparian habitat. - Identify where LID projects can be implemented, i.e. convert southwest outlet at Midway Bridge into a bioswale. - Construct detention basins per the 1997 SDMP amendment - Improve bike paths around Comanche Creeks - Encourage alternative transportation for employees of businesses in this area, as currently all of Otterson Dr. is used by employee parking for Build.com. - Quality -Provide filtering of stormwater runoff at northwest outlet at Midway Bridge and at outlets at Valine and Wrex. -Provide filtering of stormwater runoff from Hegan Lane Business Park (outlet into CC is west of CCG, pollutants are probably mostly hydrocarbons from the large amount of impervious surfaces of parking lot and street parking). - Remove and reduce trash - Gain a better understanding of Comanche Creek water levels and operations -Develop a working relationship with M&T Ranch to coordinate communications about their control of the water level in CC with creek cleanups and other in-stream activities. - Develop a better understanding of when they reduce water flows and plan in-stream activities based on this information. -Provide real-time online information about water flow diversion into Comanche Creek (CC) at Phelan Dam to help with trash removal efforts downstream, especially at Comanche Creek Greenway (CCG). -Enhance CC operations - Remove invasive vegetation -Reduce silt buildup in CC - Reduce silt entering CC from Fair Street Detention Basin -Develop a program (or continue and improve current efforts) to help reduce storm water impacts from homeless encampment along creek, detention basins, bridges, and other areas where water quality is impacted.	Medium	Yes, City of Chico	Medium	High	SWRP	Why grouped as stand alone SWRP project instead of grouped under a letter (M, etc.)? How were affordability and implementability rankings determined?	This project is not a stand-alone project, it is a grouped project. This project was not grouped with Project M because this project is related to City-wide draiange issues and problems, and Project M is related to Big Chico Creek. Because this project constitutes a large planning/study project, it was rated as medium for affordability and high for implementability.
P	Updating the City's stormwater planning and policies	- Update City's SW policies and regulations to include developing computer models of the City's drainage system that are capable of modeling water quality. It would include evaluating drainage and flood control, implementation of low impact development, water quality best management practices, and would include programs like creek clean ups, water quality monitoring, and habitat enhancement, etc. It would include opportunities to use storm water for landscape irrigation or other uses. It should have a public education element too. A goal should be to address hydromodification from development. - Update the City's development standards to clearly identify what water quality improvements and facilities are needed, how the improvements should be sized, what process is to be used for achieving approval of the storm water quality improvements and facilities by the City, and identification of storm water quality development impact fees. The project should also identify what the annual O&M costs are for the improvements and facilities, estimate the annual O&M costs, and identify a method like establishment of a water quality zone of benefit or community facilities district that results in monthly storm water fees being paid by new development. Additionally, regulations and policies for the existing City should be established or updated, and a funding mechanism for generating storm water funds from the existing City areas should be evaluated, hopefully leading to a secure O&M funding source. - Identify where channel stabilization and riparian habitat enhancement is needed - Establish a stream maintenance inspection and monitoring program, include trash and debris removal, exotic plant eradication, revegetation and stream bank repair and maintenance. Could lean heavily on volunteers. - Develop stormwater capture and reuse plan - Identify and evaluate groundwater recharge - Identify street segments and parking lots that can be retrofitted into green streets or green parking lots using vegetated swales, vegetated buffer strips, bioretention planters, and mechanical treatment systems - Evaluate where LID is needed, including Bidwell Park - Where there is room between the channel and the borders of the Greenbelt pull back storm Drain outfalls and install Bioswales, with spreading slabs and Energy dissipation before the channel. - Create Hydrologic Floodplains on streams - Bank Slope Reduction and Stabilization in ag and rural areas - Develop a water-wise and river-friendly landscape program -Develop a program (or continue and improve current efforts) to help reduce storm water impacts from homeless encampment along creek, detention basins, bridges, and other areas where water quality is impacted.	Medium	Yes, City of Chico, Yes, Stream Team	Medium	High	SWRP	Why grouped as stand alone SWRP project instead of grouped under a letter (M, etc.)? How were affordability and implementability rankings determined?	This project is not a stand-alone project, it is a grouped project. This project was not grouped with Project M because this project is related to City-wide draiange issues and problems, and Project M is related to Big Chico Creek. Because this project constitutes a large planning/study project, it was rated as medium for affordability and high for implementability.

Table 1. Comments and Responses on the Intial Project Screening

Project Number or Letter	Title of Recommended Project	Project Description	Publicly Owned Land Evaluation (High, Medium, Low)	Project Sponsor Evaluation* (Yes, No)	Estimated Affordability Evaluation High, Medium, Low	Implementability Evaluation (High, Medium, Low)	Evaluate as a SWRP Project or Retain as an Initial Project (note A) (SWRP or Initial)	Comments Received from Stream Team	Response to Comment
Q	Teichert Ponds Improvement Project	**Pond Improvements** Reroute the small east side storm drains so that they don't dump directly into Pond 1. Remove the silt buildup in the ponds and its associated contaminants. Separate Pond 1 (freshwater) from Ponds 2-3 and rework Ponds 2 and 3 so that Pond 2 can be periodically drained and cleaned. Work with the Butte County Mosquito and Vector Control District to develop a plan that will reduce the need for mosquito control. Remove the major invasive plant species: parrot's feather, tree of heaven, Himalayan blackberry, Chinese tallow tree, pyracantha and arundo (1-2 small stands). Improve outfall screening to reducing buildup and flooding. Convert some portion of the first pond and the adjacent area to a cleanable settling and trash removing basin and a constructed wetland to absorb toxins and sediment and to be removed periodically. **Site Improvements** The dirt roadway on the north side floods almost every winter. Solve this problem. Finish removing the chain link fencing around Pond 1 to improve access for invasive plant control and trash cleanup. Construct a walking trail on the east side of the Ponds to improve public access and reduce undesirable behavior (camping, encroachments by east side neighbors, yard waste dumping). limit illegal encampment to reduce trash buildup connect bike path, LID implementation and green streets retrofit to reduce runoff carried to pond **Community Outreach/Education** Implement trash reduction outreach campaign and trash and water quality surveys collaborate with existing citizen monitoring to track project effectiveness and to provide related public stormwater education and outreach (target DACs, schools, businesses contributing runoff to Teichert Pond), green job training to assist with project implementation, develop outreach and education plan with roles for interested community organizations, initiate outdoor classroom curriculum linked with project objectives Develop a program (or continue and improve current efforts) to help reduce storm water impacts from homeless encampment along creek, detention basins, bridges, and other areas where water quality is impacted.	High	Yes, City of Chico	Low	Low	SWRP	Why grouped as stand alone SWRP project instead of grouped under a letter (M, etc.)? How were affordability and implementability rankings determined?	This project is not a stand-alone project, it is a grouped project. This project was not grouped with Project M because this project is related to Techert Ponds, and Project M is related to Big Chico Creek. Construction of many project elements will be expensive, so Affordability was rated low. Many of the project elements will require several permits to be acquired from the CDFW, the USACE, and the RWQCB, so Implementability was rated low.
R	Fair Street Detention Basin Improvement Project	Remove vegetation to limit illegal encampments (trash buildup), Improve paths/roads around pond. Improve outfall screening to reduce buildup and flooding. BD Ditch Repairs to reduce flooding	High	Yes, City of Chico	Low	Low	SWRP	Why grouped as stand alone SWRP project instead of grouped under a letter (M, etc.)? How were affordability and implementability rankings determined?	This project is not a stand-alone project, it is a grouped project. This project was not grouped with Project M because this project is related to the Fair Street Detention Basin, and Project M is related to Big Chico Creek. This project was rated with a low Affordability because the construction elements of this project will be difficult and expensive to implement. Because this project will require significant permitting effort (the BD ditch work), it was rated with low Implementability.
Note: For "initial" rated projects, see related grouped/consolidated projects at bottom of this table (lettered projects).					Total Number of SWRP Projects		101		
* POEI = Public outreach, education, and involvement				Number of Projects Identified as Initial Projects:			14		
				Number of Projects Identified as SWRP Projects:			87		
		Number of SWRP Projects when Projects are Combined as Described Above:					18		
			Projects that Include Public, Outreach, Education, or Involvement:				55		
					Specific SWRP Projects		16 & 68, 33, 40, 44, 47, 59, 65, 73, 77, 85, G, I, M, N, O, P, Q, R		

*Project sponsorship includes a commitment of the project's required capital and annual operations and maintenance funding.

Legend:

SWRP Project is being considered for by the Technical Advisory Committee for further evaluation, ranking, and prioritization.