TOWN OF FAIRFAX
STAFF REPORT
October 20, 2021

TO: Mayor and Town Council

FROM: Jonathon Goldman, Interim Public Works Director
Michael Vivrette, Finance Director
Adam Politzer, Interim Town Manager

SUBJECT: Discuss and consider appropriating American Rescue Plan Act ("ARPA") funds for the Fairfax Water Conservation Program ("FWCP") as recommended by the Climate Action Committee

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This item was continued from the October 6, 2021 Council meeting.

RECOMMENDATION

Consider appropriating funds for the Fairfax Water Conservation Program ("FWCP") as recommended by the Climate Action Committee subject to an agreement to be negotiated which will return to Council for consideration of approval.

BACKGROUND

Staff provided background on Public Law No: 117-2 (PL 117-2, enacted March11, 2021), the American Rescue Plan Act of 2021 ("ARPA") to Council and the community during the course of Council's September 1, 2021 regular meeting. Council specifically requested that further outreach be conducted to solicit additional feedback and directed Staff to continue to vet the FWCP and explore enhancements or alternatives. Staff finds that the proposed program's intent, to invest in critical water conservation infrastructure in collaboration with Marin Water, can be expected to comply with the rules for allowable uses pursuant to the statutory language of PL 117-2, "… D. to make necessary investments in water, sewer, or broadband infrastructure." (see: 135 STAT. 226 (c) REQUIREMENTS, (1) USE OF FUNDS, (D)).

At its regular meeting on September 21st, the Town's Climate Action Committee received a revised proposal from Sustainable Fairfax representatives Nina Luttinger and Laura Vernon. The Climate Action Committee Agenda (copy attached[1]) was highlighted in the Town's September 20th newsletter[2], and the CAC provided information to and received feedback from community members from a table at the recent Town Picnic.

The Climate Action Committee provided feedback, received public comment and approved the revised proposal. The Climate Action Committee is recommending that the Town Council approve the request to appropriate funds for the FWCP in its full amount of $200,000.

On September 29th the Public Works Director and Finance Director met with representatives of Sustainable Fairfax to review the FWCP proposal and provided feedback.

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[1] https://www.townoffairfax.org/meetings/climate-action-committee-september-21-2021/

[2] https://myemail.constantcontact.com/September-20th---Town-News.html?soid=1118431400011&aid=TsoGWytup1Q

DISCUSSION

Councilmembers, boards and commissions, staff and other advisory groups continue to monitor the potential for use of ARPA funds. Further, additional federal legislation has been approved for infrastructure investments, and additional funding may be forthcoming. Staff has reached out to nearby jurisdictions to gather information regarding their planned uses for ARPA funds.

Council considered several potential projects at its September 1, 2021 meeting and did not direct Staff to prepare a resolution appropriating funds at that time. The Town's Climate Action Committee ("CAC"), in collaboration with the Marin Municipal Water District ("Marin Water") and Sustainable Fairfax, recommended establishment of the FWCP intended to build on the programs offered by Marin Water to dramatically increase the adoption of water conservation strategies among the residents and businesses of Fairfax, and beyond. Sustainable Fairfax and the CAC have prepared a presentation to provide details of the proposed FWCP and request appropriation of ARPA funds.

Staff has identified several alternative courses of action for Council's consideration. Two of those are:

A. Council may wish to continue to accumulate potential projects and programs for funding under the ARPA, collaborating with neighboring jurisdictions to identify priorities and better leverage Fairfax's sensibilities and priorities into the FY 22/23 budget process having more permanent staff in the Town Manager and Public Works Director roles.

B. Council may wish to endorse and participate in the FWCP. There are several ways to structure the Town of Fairfax's participation, here are three options for your consideration and discussion.
    - The Town of Fairfax could be the primary fiscal agent, committing up to $200,000 to the fund the program as recommended by the Climate Action Committee.
    - The Town of Fairfax could participate as a program partner and contribute an appropriate percentage of funding as one of several fiscal partners.
    - The Town of Fairfax could contribute funds to an existing organization, such as Marin Water and request that they provide the administrative oversight and support.

FISCAL IMPACT

No fiscal impact has been identified with Council's receipt of this report. Appropriation of any of the already programmed $900,000 in the adopted budget will have no change in fiscal impact.

RECOMMENDATIONS

Receive report and presentation.
Questions of Staff.
Public comment.
Consider appropriating funds for the Fairfax Water Conservation Program ("FWCP") as recommended by the Climate Action Committee subject to an agreement to be negotiated which will return to Council for consideration of approval.
Discussion and direction to Staff.

ATTACHMENTS

A. Revised Fairfax Water Conservation Proposal
B. Climate Action Committee Agenda for September 21, 2021 Meeting

FAIRFAX WATER CONSERVATION PROGRAM PROPOSAL*

September 29, 2021

Submitted by:
Nina Luttinger, Sustainable Fairfax
Laura Vernon, Sustainable Fairfax
Stephanie Hellman, Town of Fairfax Vice Mayor
Walter Vernon, Chair, Fairfax Climate Action Committee

Supported by:
Board of Directors, Marin Water
Fairfax Climate Action Committee

**This proposal is specifically for the Town of Fairfax with the hope it will serve as a draft model for other towns in the water district to duplicate and customize to reflect individual town priorities. By working together using similar program structures, we can exponentially increase our collective capacity to meet the necessary water use reduction goals.*

The following was developed in collaboration with the Marin Water Conservation Management department.

I. THE WATER EMERGENCY

The water supply for the town of Fairfax, California is vastly diminished due to drought. With roughly 7,500 inhabitants, Fairfax uses an estimated 939,672 gallons of water per day (based on district-wide per capita consumption from Marin Water). Precipitation in the 2021 winter season yielded a mere 38-40% of the average. The local system of reservoirs, which supplies 75% of the county's water, are at 42% of capacity (as of 7-19-21) compared to the average 81% of capacity for this time of year (source: Marin Water). Marin Water typically gets the remaining 25% of its needs from contracts with Sonoma's Russian River supply. But this year, Sonoma is also under drought and is not contracting any of its water out of the county.

Projecting an inadequate supply of water in its reservoirs, Marin Water is examining the possibility of pumping water through a pipeline across the Richmond Bridge (as they did for a previous drought many years ago) and is also considering the construction of a costly desalination plant. Before significant time- & cost-intensive construction projects are undertaken, new and innovative ways to conserve and reuse water are needed. As climate change models predict ever hotter and drier conditions in this region, more must be done to increase water conservation in Fairfax and across the entire County—not just to meet human needs but also to provide a secure supply for the entire ecosystem. Doing so will create better long-term climate resilience in the face of worsening conditions.

Marin Water offers a broad spectrum of different conservation strategies and programs to increase water awareness and reduce water demands. The current call to action to address this historic drought is a 40% district-wide reduction in water consumption. But the utility cannot offer very personalized attention to its 191,000 users (61,000 accounts) spread across 11 towns. Their approach is generally to offer a suite of different conservation options and to respond to interested parties. To help meet its ambitious goal, the Fairfax Water Conservation Program can take a localized, focused effort to reduce water demand through a combination of education, outreach, and rebates that dovetail with Marin Water's programs.

II. PROGRAM PROPOSAL

The Fairfax Water Conservation Program (FWCP) aims to build on the programs offered by Marin Water to dramatically increase the adoption of water conservation strategies among the residents and businesses of Fairfax, and beyond. The Program intends to reach out to groups and organizations like Resilient Neighbors, Marin Master Gardeners, Rising Sun, Sustainable Marin, Green Change, North Bay Conservation Corp and others, to work on shared strategies.

By building a successful and effective system for streamlining adoption, we will create a model that could expand across the water district, and perhaps the entire state. This pilot program would be an extremely localized and hands-on approach that provides direct interaction with residents and businesses--in critical ways that Marin Water does not have the bandwidth to support in the timeline dictated by the emergency drought situation.

While this program is focused exclusively on Fairfax, it is created with extensibility to other towns in mind. There is an opportunity for each town to embrace water conservation strategies and provide the benefits of a networked community to share ideas/strategies/resources/marketing materials that can help meet our collective goals and create more resilient conditions for an uncertain future.

The Fairfax Water Conservation Program ("FWCP") will fundamentally be structured to coordinate and manage a neighbor-helping-neighbor approach using a team of trained volunteers -- a "Water Warrior" Corps—that will assist with home water audits, engage directly with residents and businesses to facilitate adoption of conservation measures, help with low-water use garden ideas and more. To date, there has already been interest in the community to participate. In addition, the program will offer rebates for conservation measures (e.g. greywater, rainwater catchment) that will further enhance adoption.

III. PROGRAM GOALS (see attached Impact Projections worksheet)

- Reduce water consumption in Fairfax by at least 20 million gallons per year
- Free home consultations for at least 20% of households (670 of the 3,350 households)
- Increase residential, commercial & institutional adoption of water conservation strategies to 30% of Fairfax customers employing at least one method.
- Increase public awareness of water conservation strategies to 80%.
- Become a pilot program that becomes more widely adopted throughout Marin County and the rest of California. Make materials available to facilitate the adoption of our program by other communities.

IV. WATER CONSERVATION STRATEGIES

The goal of this program is to build on Marin Water's effective conservation measures by driving significantly higher adoption rates in our town. This will help the District meet its ambitious goal of a 40% reduction in water consumption across the region. Using a very hands-on, personalized and highly localized approach that is not possible from a large water utility company, we will focus on 7 program areas:

1. **Greywater** (or graywater) is relatively clean waste water from approved and appropriate appliances, bathroom sinks, baths/showers, and washing machines. Reusing greywater for irrigating gardens directly reduces the consumption of limited potable water supplies. Various methods can be used to collect greywater, including very low tech solutions like placing buckets in showers to capture water and outdoor showers that drain to non-edible gardens; to higher tech solutions such as Laundry to Landscape valves that divert washing machine water to the garden, and complex whole house systems. Such systems can range in cost from free to several thousands of dollars, depending on site conditions.

   A California study in 2012 found that installing greywater systems saved 17 gallons / day per person (14,565 gallons a year) or 68 gallons per household for a family of 4. Using greywater also reduces energy consumption, as the water is not pumped from supply to the household (pumping water is actually a significant source of California's carbon / energy footprint) and less hot water is used.

   FWCP Actions: *The FWCP will proactively reach out to residents and businesses, providing education, home consultations provided by the Water Warriors team, information on eligible greywater-related rebates, discounted materials and/or delivery of MW materials, and workshops. Locations that require a more indepth assistance will be directed to MW or other valuable resources.*

2. **Rainwater Harvesting** entails the collection of rainwater, rather than allowing it to run off. Rainwater is collected from roofs and channeled to a tank or cistern, where it can be used for

irrigation or toilet flushing. This reduces the need to use potable water for things that don't need potable water. It also reduces overall carbon footprint by reducing the need to pump water to the home. The general rule of thumb is that for every 1,000 sf of rooftop, one can collect about 600 gallons *per 1" of rainfall (*Fairfax's rainfall is roughly 32"/year, which means a 1,000 sf rooftop could generate 600x32=19,200 gallons). For example, in Japan a big sports stadium collects rainwater for toilet flushing. The Frankfurt Airport in Germany collects rainwater for irrigation and toilet flushing. An organization in Virginia uses rainwater from the roof of a laundry facility in the washing machines.

FWCP Actions: *The FWCP will proactively reach out to residents and businesses, providing education, home consultations provided by the Water Warriors team, rainwater-related rebates, discounted materials and/or delivery of MW materials, and workshops. We will explore creating a purchasing co-op for cisterns and tanks to streamline adoption.*

3. **Home Conservation Strategies** include many efforts focused on getting people to consider every gallon of water used in the home—from doing dishes, to using appliances with water in mind, to limiting showering, to reusing water wherever possible and most importantly educating customers on how to read their water meter to check for leaks and further understand their water use. Ideally, we can get people thinking about their water use with the same level of intention as they think about trash and recycling.

   FWCP Actions: *A team of volunteer Water Warriors will provide free home consultations, sharing and delivering water conservation tools directly to the home, assisting users in accessing MW resources like turf conversion to low water use plants, greywater strategies, low flow showerheads, high efficiency toilets, composting toilets, and more.* Providing education, technical support to install, and rebates, the program will heavily promote the adoption of water flumes, so residents can monitor their home use in real time. We may also explore creating a free lending library of flumes, for households who just want to use them for a limited time. We will work with local retailers like Fairfax Lumber to create a special Drought-Friendly Tools section.

4. **Low-Water Use Gardening** can significantly reduce water consumption for each water account. Water use in the region doubles during the summer months due to irrigation, which demonstrates the opportunity to obtain long term water savings as a result of converting high water use plants to drought tolerant, low water use plant material. Strategies include using efficient irrigation solutions, site management, transitioning to water efficient plants and how to keep them alive during droughts.

   FWCP Actions: *The program proposes to again, use a neighbor-helping-neighbor strategy (Water Warriors team) to share knowledge and resources on gardening during times of drought. We will explore creating a list of water-wise plants (ideally ones that are also effective in sequestering carbon) as a reference for residents. For many gardeners, this will be an incredibly useful service.*

5. **Reducing Consumption Among Large Local Commercial/Institutional Users**
   Large commercial & institutional users of water include Recreational Facilities, Restaurants, Laundromats, Car Washes, and Schools. Such businesses are inherently preoccupied with their

operations and finances and have very few resources to consider exploring new processes and equipment.

FWCP Actions: *Our program will reach directly out to decision makers at these businesses, connect them to Marin Water's conservation options, and help them outline a plan for reducing water consumption (working in conjunction with Marin Water as needed). Wherever possible, we will facilitate the adoption of rainwater harvesting, greywater systems and other water saving equipment available through Marin Water's rebate programs. We will aim to implement the use of recycled water at the Golf Course. We will work to get better water conservation signage up in all commercial businesses and institutions.*

6. **Increasing the Adoption of Recycled Water.** The Las Gallinas Water Treatment facility is currently giving away free recycled water from San Rafael. This water is suitable for irrigation, which is one of the biggest uses of our local water supplies (it uses almost a third of our consumption). Given the exceptional drought, potable water should not be used for irrigation.

   FWCP Actions: *We will explore the idea of creating a delivery service for recycled water from the Las Gallinas Water Treatment Center. This could be used for irrigation by residents and also large institutional / commercial businesses (eg the golf course). We will also incentivize the use of totes/tanks for storing recycled water (and / or rainwater). Because the unit costs and shipping costs of these containers are fairly high, we will explore the idea of creating a purchasing co-op that would allow us to achieve economies of scale, bringing down the cost for end users.*

7. **Turf Removal** is a priority Marin Water conservation measure that incentivizes homeowners to remove high water demand grass lawns from their properties. Currently, Marin Water pays customers $3/sq ft for turf removal. It is estimated that every square foot of grass removed results in 24 gallons per year saved. So a property that removes 1,000 sq ft of grass saves 24,000 gallons per year.

   FWCP Actions: *The FWCP marketing and educational materials will encourage residents to take advantage of MW's program and socialize the idea that green lawns are out of favor. Much of our efforts in this component will rely on increasing public awareness about MW's generous incentives, its Mulch Madness Program, and the huge impact turf removal has on water savings. After lawn removal, the Water Warriors will assist with low water garden ideas.*

V. PROGRAM COMPONENTS

- **Education and Home Consultations**: The Water Warrior Corps will be a core mechanism to do home consultations, regular tabling downtown and help community members reduce water use. At tablings we will heavily promote the use of water flumes to monitor and reduce consumption.

  Our team will visit households and provide a simple report detailing various water conservation measures, including specific rainwater catchment and greywater options (from simple things like using buckets in the shower for use on gardens, to more involved strategies that require plumbing like outdoor showers that drain to non-edible gardens, rainwater catchment, etc). We will also offer to install water flumes (for which we will offer additional rebates on top of what Marin Water offers for these) during these visits so residents can get real time feedback on their consumption. With good followup and facilitating connections to contractors and equipment, we will aim to get

very high conservation adoption rates. For households who are concerned about COVID, we will also offer home audits via zoom/phone (Marin Water says this works well).

The program will use social media, mailers and posters, promote online zoom webinars, and create a Resource List of Qualified Local Contractors who have installed water conservation systems (greywater, rainwater catchment, etc). We will work with the town to ensure adequate water conservation-related content on their website. We may create a friendly Water Hero competition that features residents/businesses who have reduced their water use by more than 40% since a year ago (proven by looking at water bills). We will explore the creation of a 30 second short film on water conservation, for use as an educational PSA in the town cinema.

We will mentor a high school water conservation club (at Archie Williams) and help ensure that young people across the town are educated about the drought and how to conserve water.
We will also work with Marin Water to improve their billing statements to better encourage conservation (for example, including normative behavior-- eg how does my bill compare with the neighborhood average; how did I do this month vs last billing statement; and visual prompts (smiley face for being below the consumption goal and frowny face for being above the goal).

We will actively recruit our Water Warrior team via extensive outreach to neighborhood groups, water-related organizations, Sustainable Fairfax's network, the town's website, social media, and outreach to the Sunrise Center (an employment training nonprofit).

- **Rebates & Services** for water conservation equipment, including greywater, rain catchment, water flume meters, etc. These would be additional rebates beyond what Marin Water offers, that would make adoption even easier for residents. We may explore creating a buying co-op to achieve economies of scale for purchases of rainwater and greywater systems. We may explore creating a recycled water delivery subscription service (providing weekly or biweekly deliveries with an electric or hybrid truck) from Las Gallinas Water Treatment facility to residents.

- **Outreach to Businesses/Institutions** to educate them about Marin Water's conservation options, connect them to MW resources/rebates, and provide logistical support for implementation if needed. Work to educate business/institution employees about water conservation and install signage about water conservation in all commercial facilities.

- **Demonstration Projects / Garden Tours** to show real examples in the community.

- **Evaluation & Tracking** our impacts are crucial elements of our program. Water warrior site home visits, including # installations, estimation of water saved (and money saved by the participant), and overall town water savings will all be tracked.

VI. PROGRAM BENEFITS

- Save at least 20 million gallons of water per year in Fairfax per year (assumptions provided below)
- Save at least 255 million gallons of water in lifetime savings
- Increase public awareness about the need for water conservation & greywater adoption
- Build a more resilient community to address the likelihood of ongoing water shortages

- Create a more sustainable environment for the wildlife and ecology of our watershed (more water available for environmental releases)
- Create a model for implementing a town-wide action program that can be adopted by other towns in Marin and the rest of the state
- Reduce our Carbon Footprint from reduced need for pumping water
- Help reduce the need for much more costly Richmond pipeline or desalination plant
- Save money (for residents and businesses)
- Create jobs (program personnel and contractors/plumbers/irrigation specialists)

VII. IMPLEMENTATION COMPONENTS (1 year)

Education

- Create a volunteer team of "Water Warriors" trained by MW and other experts who can perform home water consultations and mentor their neighbors
- Regular water conservation zoom webinars to introduce people to strategies and to the new Water Conservation Program (coordinated with Marin Water and other towns; create a master calendar of water conservation educational opportunities)
- Distribute posters and postcards to residents and businesses
- Table at public events such as the Farmers Market, in public space (eg Good Earth)
- Create and distribute a list of local contractors/plumbers/irrigation specialists experienced with greywater and rain catchment installations

Home Consultations & Installations

- Perform free water conservation audits for up to 20% of households in Fairfax (670 households). This is approximately 3 per business day for 12 months.
- Provide rebates for greywater/rain catchment installations, with the goal of getting up to 30% adoption rate of at least one new conservation strategy.
- Proactively drive adoption of Marin Water's conservation measures among commercial and institutional water users in Fairfax (recreational facilities, schools, town hall); with the goal of getting up to 30% of businesses/institutions adopting at least one new water conservation strategy.

Program Tracking and Evaluation

Throughout the project, our team will evaluate and report on our processes and track progress for public review. Measurable deliverables are crucial to evaluating the program's success. Progress reports will be provided to the council regularly. Metrics include:

- Estimated water savings (gallons/year)
- Estimated water savings per lifetime (gallons)
- Determine the community-wide gallons per capita per day reduction
- # households who receive a water conservation audit
- # of people reached with public awareness campaigns through our efforts
- # households who adopt at least one new water conservation strategy
- # of businesses who adopt at least one new water conservation strategy
- Estimated impact on carbon footprint by reducing need for pumped water and heated water
- Aggregate cost savings from reduced water bills

VIII. TEAM

This program will be managed by Sustainable Fairfax, a 501c3 which has implemented various conservation programs for the Town in the past:

Program Manager (30 hrs/wk)

- Program Administration
- Oversee Field Manager and Communications Manager
- Main liaison with Marin Water and the Town of Fairfax
- Strategic partnerships with state and local agencies, local nonprofits
- Program tracks and reporting

Field Manager (20 hrs/wk)

- Contractor coordination
- Audit coordination
- Training mentors for home audits
- Works with businesses (e.g., Fairfax Lumber, The Backyard Farmer) on conservation supplies

Education & Communications Manager (10 hrs/wk)

- Social media and outreach
- Event coordination
- Creation of educational materials: emails, posters, postcards, etc
- Strategic partnerships with state and local agencies around messaging and education

IX. RESOURCES REQUIRED

$124,800	Program Administration:	Program Manager @30 hours/wk; Field Manager @20 hrs/wk; Social Media Coordinator @10 hrs/wk
		Perform Home Audits, Business/Institutional Outreach, Data Collection, Social Media/Marketing, Liaise with Government Agencies, Track Progress
$8,200	Education	Create marketing materials for Water Warriors volunteers, tabling downtown, posters, mailers, signage
		Demonstration projects and Garden Tours
$67,000	Rebates	For residential water conservation installations (greywater, rain catch, and water efficient appliances), including Laundry to Landscape, etc. Calculations below:
	3350	# households
	20%	participation rate
	670	# participating households
	$100	$ avg spent per participant
$200,000	**TOTAL**	
33.50%	% of budget that is rebates	
Staffing Detail		
$62,400	3/4 time (30 hrs/wk) program manager	
$41,600	1/2 time (20 hrs) field manager	
$20,800	1/4 time (10 hrs/wk) social media / communications	
$124,800	sum	

This proposal can also be staged as a 6 month program, with a budget of $100,000. All program goals would be adjusted accordingly.

Marin Water District has committed to contributing an additional $60K to this initiative in the form of outreach, training, material supplies, etc.

X. STRATEGIC PARTNERS

- Sustainable Fairfax
    - Program management
        - Contracted staff
        - Implementation
        - Quarterly reporting to town

- Town of Fairfax
    - Secure funding and allocation
    - Review quarterly reports from program manager
    - Partner with Sustainable Fairfax, and MW on outreach and solutions for high consumption institutional users
    - Permitting process (where applicable)

- Marin Water
    - Program Support (marketing, webpage support for customized pages),
    - Training Field Manager [who in turn will train Water Warrior Corps]
    - Administer rebates for our program
    - Water data tracking support
    - Report on program participation in Fairfax (monthly)
    - Water conservation supplies (e.g.hose end nozzles, low flow hardware, buckets)

- Local Water Conservation Resources and Expertise
    - Resilient Neighborhoods
    - Marin Master Gardeners
    - Greywater Action
    - Sustainable Marin
    - Backyard Farmer, Fairfax Lumber (to provide bundles and material support)
    - Local Contractors
    - Marin County Health Department
    - WaterNow Alliance
    - Rising Sun Center for Opportunity
    - Daily Acts
    - North Bay Conservation Corps

- **Neighborhood Networks to Integrate with**
    - Firewise
    - Churches
    - Schools
    - HOAs
    - Retirement Communities

XI. POTENTIAL WATER SAVING OPPORTUNITY IN FAIRFAX

	Lifespan (yrs)	% of accounts adopting	# participants (3350 Fairfax households or accounts)	Gallons saved/participant/year	Gallons saved across Fairfax / year	Lifetime gallons saved
Greywater Residential	15	20%	670	3,060	2,050,200	30,753,000
Rainwater catchment Residential	10	10%	335	1,468	491,780	4,917,800
Rainwater Large Commercial/Institutional	10	x	5	25,900	129,500	1,295,000
Turf Removal*	20	3.00%	101	24,000	2,424,000	48,480,000
Recreational Facilities	10	See table below for details on business savings	1	x	5,592,962	55,929,616
Restaurants & bars	10	100%	20	35,040	700,800	7,008,000
Laundromats	10	100%	3	63,875	191,625	1,916,250
Other businesses	10	100%	2	29,200	58,400	584,000
Other Conservation Measures? (low flow showers, high efficiency toilets, etc)	10	5-10%	See table below		9,510,188	95,101,875
					21,149,342	**245,985,541**
*for turf removal, this assumes a 1,000 sf lawn						

IMPACT PROJECTIONS DETAIL (* Developed in collaboration with Marin Water)

Conservation Components	Gallons Saved	Assumptions
Greywater	2,050,200	20% adoption of at least one greywater strategy x 17 gallons/day x 180 days of use; awaiting some clarification from Carrie. Cost is from 670 households (20% of town) x $125 rebates. Divide this in 3 equal parts: greywater, rainwater, and Other Conservation measures
Rain catchment residential	491,668	assuming 10% of households (335 households) put in a 850 gallon tank x 1.7 multiplier [source: Marin Water];
Rain catchment Town Hall & Schools, Pavillion, School Plaza	129,500	must discuss with schools. $3500/tank x 15 tanks (5 sites w 3 tanks each). Town Hall/Fire/Police bldgs, White Hill School, Manor School, Pavillion, School Plaza bldgs. Marin Water will give $1,000 per site. We will not offer rebates to institutional/businesses.
Other measures per education	9,510,188	(eg high efficiency toilets, turn off shower valve, low flow showerheads, etc) assumptions below
Turf Removal	2,424,000	15% adoption rate (75 sites total) of the 15% of sites that are eligible, 24 gal/sqft/yr x 1000 sf/site [source: Marin Water]
Recreational Facilities	5,592,962	20% reduction off one huge user plus 20% reduction from additional recreational facilities
Restaurants & bars	700,800	20% reduction among the town's 15 restaurants and 5 bars
Laundromats	191,625	20% reduction; 3 laundromats
Other businesses	58,400	assumes 20% reduction, (eg car wash/hot tub place), based on ballpark estimate of 400 gallons/day used
TOTAL	21,149,342	

Assumptions		
Restaurants	480	gallons water used per restaurant per day assumes 24 gallons per seat per day x 20 seats/rest
	9,600	gallons per day for all restaurants & bars, assuming 15 restos + 5 bars
	3,504,000	gallons per year consumed, assuming 15 restos & 5 bars in town
	700,800	gallons saved per year, if we reach 20% savings across all restos & bars
Laundromats	875	gallons of water per day, per laundromat, assuming 25 loads per day x 35 gallons/load (an industry veteran estimated a much higher volume -- minimum of 2,000 gallons per day)
	319,375	per year
	958,125	annual water consumption by 3 laundromats (multiply above x 3)
	191,625	gallons saved, assuming a 20% reduction
Other conservation measures undertaken by residents		
High efficiency toilets	2,690,050	gallons saved per day, assumes 10% adoption rate so 335 households; assuming average toilet here is 3.5 gallon/flush. assuming it might save 2.22 gallons/flush to convert to a high efficiency x 10 flushes/day = 22 gallons per house per day). 7370 gallons/day saved/town if 10% adoption rate
Low flow showerheads; reduced shower time	4,707,588	assumes 10% adoption, 335 houses; from 2.5 gpm to 1.2 gpm = 1.3 gpm saved x 10 min shower = 13 gallons/shower x 2 people/household = 26 gallons/day/household. 8710 gallons per day saved/town if 10% adoption. Plus 10% of pop who will reduce shower time from 10 to 5 minutes (2.5gpm x 5)=12.5 gallon x 335 = 4187 gallons/household/day x 365
Turn off valve at shower for pausing while soaping	609,550	2 mins x 2.5 gallons/minute = 5 gallons per shower x 2 showers/household per day = 10 gallons/day; assuming 5% adoption rate so 167 households x estimated 10 gallons/day per house saved
Changes in landscaping (not turf removal)	1,503,000	assumes irrigation is 180 days; daily gallons saved, assuming 5% adoption rate, 167 households, assuming reduction of 50 gallons per day irrigation; changes in watering schedule, changes in plant species towards more drought tolerant; MW comment: I think you could get a 50% reduction in landscape water use through adjustments in schedule to comply with the current landscape restrictions.
TOTAL	**9,510,188**	
Residential Home Consultations Calculation		

		670 homes (20% of homes) in 1 year will take at least one new conservation measure
	56	homes visited per month x 12 months
	14	homes visited per week
	3	per business da. achievable if avg audit is 60 minutes; plus we have to factor in business outreach
Potential District-Wide Impact (not included in figures above)		
Potential impact for other 10 towns included in the water district might adopt our model	**155,564,925**	gallons of water saved per year, if adopted by 10 other towns (this is in addition to our town's 20 million gallon savings)
Most are bigger than Fairfax, but assume they are about the same, to be conservative		assuming savings would be the same as ours x 10 additional towns; I took out the golf course number, since most towns do not have one (although Mill Valley does); of course San Rafael (pop. 58k) is nearly 8x bigger so the savings would be quite a bit larger

XII. Q&A

1. **Why is this a good use of Town Funding?**

Water is vital to our existence here. Our reservoirs are at historically low levels - holding less than a year's supply of water. The current drought is now deemed "exceptional". The water utility (Marin Water) has set a goal of reducing water consumption by 40% yet to date, we have only achieved a 27.5% reduction. While the utility is considering much more costly and time consuming options (a pipeline from Richmond and a desalination plant), we should absolutely maximize our conservation efforts before other alternatives are implemented.

2. **How is this getting paid for?**

The town of Fairfax would pay for this proposal with money from COVID Relief funding (which can be earmarked for water projects). Marin Water (the water utility) is contributing an estimated $60k in "in-kind" services and water saving tools.

3. **How will you recruit volunteers?**

We intend to use a variety of social media platforms to get a strong and consistent message out to the community about the importance of being a *Water Warrior* (or engaging as a volunteer in any way that works) and what it means to be one. Fairfax residents get information from newsletters (Sustainable Fairfax, Town of Fairfax, Fairfax Volunteers), websites, Nextdoor, Facebook, Instagram, Twitter, newspapers, and more. The social media coordinator function provides an effective and efficient means of communication across these platforms to maximize engagement.

4. **How was the public involved in this proposal?**

On September 21, 2021, the Fairfax Climate Action Committee held a meeting to review and discuss this proposal with the public. The public was notified of the meeting via the town newsletter, the town's website, a town Facebook page, a water-related thread on NextDoor, the Climate Action Committee's website. Input from the public and the Climate Action Committee was incorporated into a revised proposal on September 23, 2021.

5. **Does Marin Water support this program?**

Marin Water agrees that a local grassroots effort to increase education / outreach / rebates will help in reaching the 40% reduction goal. For that reason, the company's President of the Board Cynthia Koehler wrote a letter of support for our program and has agreed to donate up to $60k of "in-kind" services and water saving supplies.

MARIN WATER

August 20, 2021

Laura Faye
Nina Luttinger
Sustainable Fairfax
69 Bolinas Road
Fairfax, California 94930

Dear Ms. Faye and Ms. Luttinger,

We were so pleased to learn about the Fairfax Water Conservation Proposal to reduce water consumption among the residents and businesses of Fairfax. On behalf of the entire Marin Water Board of Directors, I'd like to convey our strong support for the program. The strategy of increasing education, engaging directly with residents & businesses, and offering rebates to drive higher adoption rates of conservation measures in Fairfax will benefit the region as a whole.

The District looks forward to formalizing a partnership through a contract, which will clearly define roles and responsibilities needed to implement the Fairfax Water Conservation Program. The District will assist with training volunteers to conduct home water audits, support webinars and promotional materials to educate the community about the benefits of water conservation. We will also cross promote the Fairfax Water Conservation Program on the Marin Water website and work in collaboration to determine how best to administer the two separate rebate programs to maximize efficiency in processing the applications.

Once again, thanks to Sustainable Fairfax for developing this initiative. We look forward to working with you in reducing water consumption in Fairfax and creating a model for adoption by other local cities and towns.

Sincerely,

Cynthia Koehler

Cynthia Koehler
Board President
Marin Water

TOWN OF FAIRFAX
CLIMATE ACTION COMMITTEE
REGULAR MEETING
Via Zoom Videoconference
7:00 pm, Tuesday, September 21, 2021

CORONAVIRUS (COVID-19) ADVISORY NOTICE
Consistent with State of California Executive Orders and the Marin County Public Health Officer's Orders to shelter at home, this meeting will be held by videoconference only. The public will be able to view and participate in the meeting by teleconference, as follows:

On **Zoom**:
https://us02web.zoom.us/j/89527178659?pwd=VTdDd2t4QjNBK2YwZUZpWkZ1b0pSUT09
Meeting ID: 895 2717 8659
Passcode: 298584
To speak during the public comment period, use the Raise Hand icon to be added to the queue. You will be unmuted when it is your turn.
By telephone: +1 669 900 6833
and enter the Meeting ID 895 2717 8659 when prompted. To speak during the public comment period, press *9 to be added to the queue. You will be unmuted when it is your turn.

Mission

The Mission of the Fairfax Climate Action Committee is to work with the Town Council and Town Residents to achieve the goal of zero emissions by 2030.

Meeting Agenda

7:00 – 7:15

1. Call to Order – Vernon
2. Roll Call – Lasnier
3. Approval of Agenda and Affidavit of Posting - Lasnier
4. Land Acknowledgment - Lasnier
   The Fairfax Climate Action Committee acknowledges that we are located on the un-ceded ancestral lands of the Coast Miwok people of present-day Marin County. We honor with gratitude the land itself, and all of its ancestors: past, present, and emerging.
5. Open Time for Public Expression - Lasnier
   To address the Committee on matters not on the agenda, please raise your hand and state your name and address (optional). Individuals generally have 3 minutes to speak; 5 minutes if representing a group. The Committee is not permitted to take action and state law strictly limits the right of the Committee to discuss any item not on the agenda. (Gov. Code §54954.2)
6. Approval of Minutes from July and August Regular Meetings – Lasnier
7. MCEP update – Town Staff

7:15 – 8:15 Old Business

8. ARPA Proposal #1: Fairfax Water Conservation Program
   a. Brief overview
   b. CAC Ask and answer clarifying questions
   c. Public Comment
   d. Discuss and suggestions for improving the draft proposal
   e. Action: Develop recommendation to Council

8:15 – 8:45 Old Business

NOTE: we may need to defer ARPA proposal #2 to a later meeting, if discussion on Proposal #1 goes longer than scheduled.

9. ARPA Proposal #2: Co-Op to fund solar projects for low to moderate income residents in the Town of Fairfax
    a. Brief overview
    b. CAC Ask and answer clarifying questions
    c. Public Comment
    d. Discuss suggestions for improving the draft proposal
    e. Action: Develop recommendation to Council

8:45-9:00

10. CAC announcements & New Business

ADJOURNMENT

Affidavit of Posting

I, Michele Gardner, Town Clerk of the Town of Fairfax, County of Marin, State of California, do hereby certify that I posted a copy of this Agenda at three public places in the Town of Fairfax, to wit: 1) Bulletin Board, Town Hall Offices; 2) Bulletin Board, Fairfax Post Office, and 3) Bulletin Board, Fairfax Women's Club and that each of said postings was completed on or before September 17, 2021.

Signed: _____/s/_____