AQUARION Water Company
Stewards of the Environment

Aquarion Water Company
Southwest Regional Pipeline Diversion Permit Application
Response to Public Questions

Mill River Wetland Committee and FairPLAN	
1	**The Mill River Wetland Committee and FairPLAN are concerned about the impact of this diversion on stream flow. Specifically, in regard to stream flow from the Hemlocks Reservoir into the Cricker Brook which is an important tributary of the Mill River. Have there been any recent studies prepared that address the impact of this additional diversion on stream flow specific to the Mill River, its trout breeding grounds, and the downstream ecology?**
Except when the reservoirs are spilling during high spring flows, flow in Cricker Brook immediately below the Hemlocks Dam is determined by Aquarion's releases. Aquarion's releases are not expected to change as a result of the requested diversion, but will increase as a result of DEEP's Stream Flow Standards and Regulations.	
2	**The application makes a general statement that the proposed diversion will not impact regulated stream-flows? Where are the expert specific analysis for that general statement?**
See response to Question 1.	
3	**The Mill River Watershed Plan was completed after this application was submitted to the DEEP and therefore was not included in the consideration of this permit. What are the implications of this watershed plan and its suggested actions as it relates to the permit?**
The requested diversion is not expected to have any impact on the Mill River watershed, and therefore on the Mill River Watershed Plan. Cricker Brook, which includes the Hemlocks Reservoir watershed, is included in Sub-watershed 3 of the Plan. The subwatershed was designated as a low priority for management because it is less developed and generally has relatively low pollutant loading rates. The identified management measures for the subwatershed consist of manure management and livestock-centric buffer enhancement; agricultural BMPs for soil preservation; streambank stabilization; open space preservation and septic management. The diversion requested in this application will not impact these management strategies.	
4	**Are there serious issues of contamination of manganese and nitrates that may impact the re-activation of the Housatonic Wellfield? Have experts and/or the Connecticut Department of Public Health evaluated this re-activation? Since this re-activation was required under two 2017 permits, what steps have been taken to achieve re-activation?**
There are no issues of manganese or nitrate contamination that may impact re-activation of the Housatonic Wellfield. Water quality from the wells was historically in compliance with all applicable public health standards. Aquarion does not have data that suggests elevated nitrate concentrations in the wellfield. When operating, naturally occurring manganese concentrations occasionally exceeded	

the 0.05 mg/L secondary standard that can cause water to be discolored but was consistently below EPA's 0.3 mg/L lifetime health advisory. Recent sampling performed in conjunction with the wellfield reactivation confirms that water quality meets applicable standards. Manganese in these recent samples were below the secondary standard.

Comprehensive water quality data from the wells must be reviewed and approved by the Connecticut Department of Public Health (DPH) before the wells can be returned to service. DPH has performed a Well Water Quality and Quantity Suitability Review for re-activation of four of the eight wells in the wellfield and concluded that the water from them meets water quality standards. DPH must review and approve Aquarion's plans for re-activating and treating all of the wells before they are returned to service.

See response to question 54 regarding steps taken towards re-activating the wells.

5	**What are the regulatory implications of the request that "DEEP define the SWFCR as a single service area and confirm that water can be moved within the service area without the need for additional permitting"? Doesn't this proposal represent a tremendous limitation on the public's ability to have input on water movement? Does this proposal represent a severe limitation of DEEP's regulatory authority? How does this proposal benefit the public?**

The regulatory implication of defining the SWFCR as a single service area is that diversion permits/registrations would not be required for every point of water transfer between the four towns (New Canaan, Darien, Stamford and Greenwich). Authorization for water withdrawals from local sources and into the region through the SWRP would still be required. This would be similar to the multi-town Greater Bridgeport service area and other regional water systems throughout the State such as the South Central Connecticut Regional Water Authority (RWA) in the New Haven area and the Metropolitan District Commission (MDC) in the Greater Hartford area.

If the four towns were considered a single service area it would enable the capacity of the SWRP to be utilized in Greenwich, and through Stamford to Darien and New Canaan, benefitting the public with more reliable water supply and through reduced frequency and severity of drought.

There are numerous existing interconnections that transfer water between the four towns in the SWFCR and Aquarion manages water supply and drought response planning in the area as a single region. Maintaining them as separate service areas under the diversion policy act means that extending water service down any street that crosses a town boundary requires a permit with daily transfer limits and a meter to record flows. Bi-directional flow (to and from a tank for example) and flow looping is also restricted. These constraints to orderly and efficient development of the water system would be removed if the region was defined as a single service area, as in other systems throughout the State.

6	**If this diversion is not approved or approved in some modified form, what alternative plan has Aquarion devised?**
Increasing the capacity of the SWRP was the only feasible alternative identified for meeting the region's public water supply needs. If this application is not approved the region will continue to experience frequent drought restrictions, be at high risk of running out of water, and Aquarion will not be able to meet the full reservoir release requirements of the Stream Flow Standards and Regulations.	
7	**Were these documented changes to the State of Connecticut part of your "long range water resource planning"?** • **2012 USDA change SW Coastal CT growing zone to 7b to reflect increase in mean temp.** • **2015 UMASS presentation stated "the annual mean temperature in CT has exceeded the 20th century average every year since 1993 and CT has had a 3 degree F increase in the last century.."** • **2017 EPA report concluded that CT summers will be hotter and drier and rising temps and shifting rainfall patters are likely to increase the intensity of both flooding and droughts.**
The data cited were not specifically part of Aquarion's long range water resource planning. However, increased temperatures are likely to lead to increased evaporation and increased customer demands for public water supply. The uncertainty created by temperature and other climate change impacts (see response to Question 104) means that we need to be aggressive in our efforts to mitigate their effects, through programs like conservation, design for system flexibility and resiliency, and be conservative in our water supply planning efforts.	
8	**What measures, other than diversions, has AWC invested in to prepare the state of CT for our increased risk for drought?**
Aquarion is investing to reduce the risk of drought in its systems by 1) promoting conservation to reduce usage 2) increasing the availability and reliability of supply through projects such as the SWRP and 3) developing a reservoir operations model and applying it to improve drought response triggers and action plans and for testing those plans to ensure their effectiveness.	
9	**How will the impact of shifting rainfall patterns impact the recharging of aquifers?**
Aquifer recharge is not expected to be impacted by the requested diversion.	
10	**AWC is requesting a dramatic increase from the current diversion of 7.26mgd to 14.2mgd with no population/development increase that would reflect the projected level increase to Margin of Safety how did AWC arrive at this number?**
Determination of the need for the requested 14.2 mgd diversion is detailed in Attachment C8 (Need for Diversion) to the diversion permit application and summarized on Slide 8 of the public meeting presentation (available on Aquarion's website). The analysis is based on providing the DPH target 15% margin-of-safety between supply and demand in the Southwest Fairfield County Region over the 25 year period of the requested permit utilizing demand projections from Aquarion's 2018 Water Supply Plan, currently under review by DPH, DEEP, PURA and OPM. Annual average demands in the SWFCR averaged 33 mgd and ranged from 31 – 34 mgd from 2013 through 2017. These demands include the impact of the extraordinary demand reductions during the public water supply emergency from September 2016 – April 2017 and from the first year of	

two-day per week irrigation restrictions. Approximately 15 mgd of the average 2013-2017 demand came from residential consumption.

The CT DOT projects a population increase in the four SWRP towns between 2020 and 2045 of approximately 19,000 people, primarily in Stamford. Aquarion's service area is also expected to grow to serve more of the existing population in the region. The increase in the number of people in the SWFCR that are projected to be served by Aquarion is estimated to be approximately 24,000. At an average per capita consumption rate of 70 gpcd (less than the national average) the growth in population served by Aquarion results in a projected increase in residential consumption of approximately 1.7 mgd.

Commercial consumption was projected to increase at the same rate as residential consumption (<1%/year) and industrial, public authority and sales for resale consumption were projected to remain relatively stable. Non-revenue water was assumed to be controlled to the State target 15%.

The resulting 2045 annual average demand projection is 35.8 mgd, a rate of increase of approximately 0.5% per year from 2017, which was the lowest year in the five years that the projections were based on and a year when customers were focused on conservation because it was immediately following the public water supply emergency and the first year of enforcement of the 2-day/week irrigation restrictions.

Available water from all local sources in the SWFCR (including the historically unused Wire Mill Well in Stamford) after implementation of reservoir releases in compliance with new Stream Flow Standards and Regulations is projected to be 28.6 mgd. This available water calculation does not consider the uncertainties created by climate change and assumes that local sources are operated at their calculated safe yield. Operating reservoirs at their safe yield will, by definition, theoretically result in them emptying during a 1:100 year drought – which contributed to the need for a Public Water Supply Emergency and extraordinary water usage restrictions and supply measures in the SWFCR in 2016. The available water from existing sources is therefore potentially underestimated due to these uncertainties.

In order to provide the State targeted 15% margin-of-safety of supply over demand annual average available water in the SWFCR must be approximately 41 mgd (35.8 * 1.15). The difference between the required 41 mgd and the available 28.6 mgd is the annual average 12.6 mgd required from the SWRP.

These calculations are summarized in the Table below.

Item	Annual Average Demand (mgd)
2013 – 2017 annual average demand	32.8 mgd
Change in residential consumption	1.7 mgd
Change in commercial consumption	1 mgd
Change in public authority consumption	0 mgd
Change in sales for resale consumption	0.3 mgd
Projected Annual Average Demand	**35.8 mgd**
Required Available Water for 15% MOS	41.2 mgd
Water Available from Local Sources	28.6 mgd
Annual Avg. Water Needed from SWRP	**12.6 mgd**
Maximum Daily Limit Requested	**14.2 mgd**

The maximum daily limit requested is equal to the estimated summer capacity of the SWRP after Phase 4 improvements are completed and provides for daily variability in flow to achieve the required annual average capacity. Daily variability is required to allow for flows below the annual average during times that the reservoirs are full or the SWRP, or facilities supplying water to it, are unable to operate at full capacity.

11	**With such a dramatic increase should this permit be treated as a renewal or a new permit?**

There is no difference between the application or review requirements for a diversion permit renewal or a new permit application.

12	**Has AWC worked with the Town of Greenwich in finding other ways to encourage and ENFORCE irrigation restrictions as a means of conservation since past enforced restrictions have shown a dramatic decrease in water usage?**

Aquarion has worked with the Town of Greenwich and the other three towns in the Southwest Fairfield County Region, as well as with other towns where irrigation restrictions have been implemented, to encourage and enforce its 2-day/week irrigation restrictions since the 2016 drought and appreciates the partnership that it has developed with them.

13	**Has AWC partnered with the Town of Greenwich on ways to implement and or revise their current drought ordinance so that they would be able to avoid drought crisis situations in which diversions (emergency or an increase of the current) would be necessary?**

Aquarion has improved its drought response triggers to ensure that water use restrictions are imposed early enough to be effective at avoiding drought crises such as experienced in 2016, and worked with the four towns in the SWFCR, including Greenwich, to improve communications and the effectiveness of water use restrictions. The objective of diversions such as the SWRP is to reduce the frequency and severity of required drought restrictions. Conservation efforts will continue regardless of the additional supply and reduced drought risk.

14	**We ask would AWC be willing to pay for the placement and monitoring of a USGS gage or gages in order to collect concrete data as to the overall functioning as well as the impact of the current diversions on the Greater Bridgeport System?**
Aquarion funded the installation of, and incurs the annual maintenance fees for, USGS gages currently in place below the Saugatuck (Saugatuck River Below Saugatuck Reservoir Near Lyons Plan, CT – USGS 01209005) and Aspetuck Reservoirs (Aspetuck River at Aspetuck, CT – USGS 01209105). Reservoir release monitoring below the Hemlocks Reservoir (and other Aquarion Reservoirs) will also be required by the DEEP Stream Flow Standards and Regulations. Aquarion does not believe that additional USGS gages are necessary for monitoring the impact of the requested diversion.	
15	**We ask would AWC increase transparency by sharing data as to what amount of water has been diverted via grandfathered in registered diversions that do not currently need to go through the CT DEEP permitting process?**
Aquarion will begin reporting water usage data to DEEP for registered diversions in January 2021 (based on 2020 data) as required by CGS Section 22a-368a. These data, along with data from other registered diversions throughout the State, will be made publicly available by DEEP.	
16	**Please describe the water conservation effort underway in the Southwest Region (Greenwich, Stamford, New Canaan, Darien) in terms of water saved as a percentage of water used. How could conservation in Southwest Region be reasonably expanded and what would the water savings be from such an expansion?**
Conservation in the Southwest Region since the 2016 drought has primarily focused on public education and implementation and enforcement of Aquarion's 2-day/week irrigation restrictions. Given the natural seasonal and annual variation in water usage it is difficult to quantify the savings of the program in terms of percentage of water used, however, summer (May – September) usage in the four years since implementation of the restrictions (2017 – 2020) has averaged 4.2 mgd (12%) less than the five years prior to the drought (2010 – 2015). Another indicator of the success of the program is that Monday, Thursday and Friday (the days where no watering is allowed) have become the lowest summer demand days in the region. Aquarion has continued to work with Amy Vickers, a national leader in water conservation planning, regarding conservation opportunities throughout its service territory, including the SWFCR. She analyzed single family usage before and after the irrigation restrictions and projected a potential change in single family residential usage of -0.5 mgd to + 0.8 mgd depending on the level of continued compliance with Aquarion's irrigation restrictions. In 2020, as an example, the reduction in SWFCR summer usage compared to 2010 – 2015 was 2.6 mgd, a significant savings but less than in previous years suggesting a potential reduction in customer compliance with irrigation restrictions. As a result, Aquarion's primary conservation tactic in the region is enforcement of the existing restrictions and general conservation education. It should also be noted that Aquarion has already expanded its 2-day/week irrigation restrictions to the Greater Bridgeport System Town of Westport and to the Town of Newtown. The program is expected to be further expanded to the Town of Simsbury in 2021 and to other communities with high seasonal residential use in future years. Enhanced conservation efforts are particularly	

important where supply is tight, as in the SWFCR, but are important to reduce water waste throughout the State.	
17	**What is the average water usage for a Southwest Region residential user and how does that compare to the usage for the average Bridgeport residential user**
Over the 2013-2017 period upon which Aquarion's demand projections are based, residential usage in the Southwest Fairfield County Region averaged 75 gallons per person per day (gpcd) and ranged from 51 gpcd in Stamford to 108 gpcd in Greenwich. The Greater Bridgeport System averaged 66 gpcd and ranged from 51 gpcd in Bridgeport to 182 gpcd in Weston. Residential consumption in the Towns of Easton, Fairfield, Weston, Westport and Wilton was above the SWFCR average.	
18	**What were the levels of manganese and nitrate when the Housatonic Wellfields were taken offline?**
Nitrate has not historically been an issue at the Housatonic wellfield. Manganese concentrations varied between the wells and was typically less than 0.1 mg/L. Recent testing from four wells performed in preparation of returning the wellfield to service indicated manganese concentrations below the detection limit (<0.01 mg/L) compared to the secondary (aesthetic) standard of 0.05 mg/L and nitrate concentrations between 0.4 mg/L and 1.1 mg/L compared to the standard of 10 mg/L.	
19	**Will AWC commit to keeping the manganese below the 0.05mg/L the EPA has determined as the SMCL (secondary maximum containment level)?**
Aquarion is committed to meeting all applicable water quality standards at the Housatonic Wellfield and has a goal of maintaining manganese concentrations below the aesthetic SMCL at all of its supplies. Alternatives considered to date for reactivating the Housatonic Wellfield have all included manganese removal treatment.	
20	**What will the cost be to bring these contaminated wellfields (Housatonic) back online?**
The Housatonic Wells are not contaminated (see response to question 4). Aquarion has not yet selected an alternative or designed the facilities necessary for bringing the Housatonic Wellfield back online and therefore does not have an estimate of the cost required.	

21 **What will the cost of the SWRP increased phased-in capacity increase be? Do you have breakdown for the costs of what each phase will be?**

The estimated costs for each phase of the required SWRP infrastructure improvements are:

Phase	Description	Estimated Cost ($ Million)
1	Westport/Fairfield Main Improvements	10[1]
2	Transmission Main from SWRP in Stamford	12[1]
3	Parallel SWRP to High Elevation Point	56[2]
4	Hemlocks Pump Station and Transmission Main	93[2]

1. Final costs – project complete.
2. Conceptual costs – will be refined as projects are designed.

Phase I and 4 improvements made in the Greater Bridgeport System will also benefit customers in that system. The prudency of these investments will be reviewed by the Public Utilities Regulatory Authority (PURA) in future rate hearings.

22 **The Greater Bridgeport area which will be receiving this currently contaminated (Housatonic) water has a significantly higher minority population as well as an increased economically disadvantaged population as compared to Greenwich yet they will be at a greater risk for pollution in their water and will be significantly more impacted economically if the cost of these 2 projects are spread across all AWC customers. Was this taken into account by AWC?**

The Housatonic Wellfield is not currently contaminated. Water quality in both the Greater Bridgeport System and the Southwest Fairfield County Region will continue to meet all applicable water quality standards.

Aquarion's rates are authorized by the Public Utility Regulatory Authority (PURA) through a formal rate proceeding based on capital investment and operating expenses throughout Aquarion's service territory. The cost for improving supply to the SWFCR will be spread among all Aquarion customers in the same way as the costs for constructing treatment plants, replacing aging infrastructure, and improving service quality in the Greater Bridgeport region are spread among all Aquarion customers. In its next rate application to PURA Aquarion anticipates requesting approval of an inclining block rate structure that will charge customers a higher rate for excess water usage.

Aquarion also offers a number of financial assistance programs to help eligible customers who are having difficulty paying their water bills.

23 **Was the total economic impact to the consumers of the State of Connecticut who already carry such a large utility burden and an increasingly unstable economic future taken into account by AWC?**

Aquarion is sensitive to the affordability of public water supply for our customers and the impact that our investments decisions make on water rates. Increasing the capacity of the SWRP is the most cost-effective alternative for meeting the projected water supply needs of our customers.

	Aquarion's investment in the SWRP will ultimately be subject to a prudency review by PURA through a formal rate proceeding.
24	**Aquarion, an Eversource company, is a for-profit entity. How much revenue will Aquarion derive from each day's sale of the increased water diversion requested under the permit? What gross profit will Aquarion realize from a given day's sale?**
	Aquarion expects to sell the same amount of water with or without the increased water diversion requested under this permit. The diversion allows water to be sold at reduced risk of drought and allows releases to be made from the reservoirs in the region without reduction due to inadequate water supply. The diversion will also help avoid the need for a moratorium on new service connections. It should also be noted, that under PURA's Revenue Adjustment Mechanism (CGS 16-262y) Aquarion's revenues are "de-coupled" from sales. As a result, increased sales do not increase the Company's revenues, but they do generally help to keep rates lower.
25	**Has Aquarion prepared any profit projections that assume approval of this permit application and, if so, what are those projections? What percentage of Aquarion's projected profits would be derived from water sales allowed under this permit?**
	See response to Question 24. Approval of this permit application will not impact the company's revenue or profit.
26	**As a regulated company, what is the guaranteed profit Aquarion will make with this diversion? Conversely, by aggressively promoting water conservation, which may mitigate the need for this water diversion, could Aquarion lose money with this diversion?**
	Aquarion is not guaranteed any profit from this diversion, nor will Aquarion lose money by aggressively promoting water conservation and transferring less water through the diversion (see response to Question 24).
27	**What land sales are contemplated by Aquarion over the next three years and where are those properties located?**
	The properties that Aquarion currently plans to sell in the next three years are: • 836 Lake Avenue, Greenwich • 13 Old Green Road, Newtown Notification of both planned sales have been provided to the Chief Elected Official in the town in which the land is located and to the private, non-profit land holding organizations (Land Trusts) on the list maintained by PURA.

28	**Please describe in detail each of the alternatives to this diversion that were considered by Aquarion in terms of the specific cost of use/development of those alternative sources in comparison to the cost of the proposed diversion.** **Listed in application as:** ○ **Increase reservoir storage** ○ **Develop groundwater supply** ○ **Purchase water from NYC – treated vs raw** ○ **Increase SWRP capacity**
The alternatives considered by Aquarion are detailed in Attachment M to the diversion permit application. Cost estimates for use/development of alternatives other than increasing the capacity of the SWRP were not developed because they were not considered feasible for meeting the region's public water supply needs.	
29	**What infrastructure improvements would be needed to attain the requested pipeline capacity in lieu of conservation? What are the associated costs?**
See response to Question 21. These infrastructure improvements are needed in addition to, not in lieu of, conservation.	
Erin Buckley	
30	**Why is the area that is of lower economic standing giving water to an area that is of higher economic standing?**
Aquarion's Greater Bridgeport System provides public water supply to the towns of: • Bridgeport • Monroe • Stratford • Westport • Easton • Redding • Trumbull • Wilton • Fairfield • Shelton • Weston Water supply to these communities come from reservoirs and watersheds in Shelton, Monroe, Trumbull, Newtown, Easton, Redding, Ridgefield, Bethel, Danbury, Fairfield and Weston and wells in Westport. Taking additional water from this region to meet the needs of customers in Greenwich, Stamford, Darien and New Canaan is not an environmental justice issue. Consistent with how water is managed within and between the Greater Bridgeport System communities, the SWRP provides a regional solution to the State's water supply needs. This approach is also consistent with the recently adopted Connecticut State Water Plan, which lists "Encourage regional water solutions where they are practical and beneficial" as a top ten policy recommendation and with the Governor's Council on Climate Change (GC3) draft recommendations which state that "To improve water supply resiliency it is necessary to identify areas where water supply systems could b interconnected in response to regional water shortages. This type of planning and infrastructure will ensure regional water supply flexibility in a changing climate. Aquarion is committed to meeting its public water supply obligations to all of its customers equally, regardless of economic standing. Projects like the SWRP allow us to move closer to equalizing service delivery between customers in the Greater Bridgeport and Southwest Fairfield	

County regions in terms of drought resiliency and available supply to meet regional growth and ecological stream flow needs.
31 Why cannot the water authority fine excessive use to ensure water conservation?
Aquarion's rates are regulated by the Public Utility Regulatory Authority (PURA). Aquarion's currently approved rates do not provide for fines for violating conservation restrictions, however Aquarion anticipates proposing an inclining block rates that would charge higher costs for excessive use in its next rate application to PURA. Conservation enforcement strategies are also expected to be considered through the Connecticut State Water Plan implementation.
32 Who is to say that we will not face drought? Then who is prioritized? The wealthy?
Public water supply droughts are inevitable. The objective of regional supply projects such as the SWRP are to try to equalize the risk of drought amongst Aquarion's customers. When drought restrictions are required water supply is prioritized based on the criticality of use (e.g. indoor vs outdoor) and not based on customers' economic standing.
33 Will this new pipeline effect the quality of our water in any way?
The proposed diversion is not expected to have an adverse effect on drinking water quality. Much of the area of the SWFCR that will receive water from the SWRP already does on at least a seasonal basis. Aquarion will continue its extensive water quality monitoring program and working with the Department of Public Health to ensure that water quality meets all applicable standards.
34 Why has the general public not been informed about this?
Notice of the application was sent to the First Selectmen in Darien, Easton, Fairfield, Greenwich, New Canaan, Redding, Stamford, Weston and Westport and published in the CT Post, Greenwich Time, The News-Times and The Advocate. In addition, Aquarion reached out directly and presented the application to potentially interested stakeholder groups and to the general public at a DEEP hosted meeting on August 26th. Notice of this public meeting was provided on DEEP's website and in the same newspapers as the notice of application. In addition, there will be a formal 30-day public comment period after DEEP issues it Notice of Tentative Determination.
Lake Hills Association
35 Impact on water quality, ecology and recreational use of Samp Mortar.
The Morehouse Brook Diversion and Hemlocks Reservoir are the sources related to this application that are upstream of Samp Mortar Lake. Operation of the Morehouse Brook Diversion and releases from Hemlocks Reservoir to Cricker Brook will remain unchanged as a result of the requested diversion so there will be no impact on the water quality, ecology or recreational use of Samp Mortar Lake.
36 Have any studies been performed on the effects of the diversion on the lake (Samp Mortar), Mill River and the downstream ecosystems, including, projections that take into account the warming climate that we are experiencing?
See response to Question Number 35.
37 How will the diversion affect the flow rates at the Mill River and Cricker Brook downstream?
See response to Question Number 35.

38	**Will the resultant flow rates be up to the new regulations for streamflow currently being developed by CT DEEP?**
Releases from the Hemlocks Reservoir will continue to be in compliance with CT DEEP's current Stream Flow Regulations (RCSA 26-141a), and consistent with Aquarion's 2007 Agreement with the Town of Fairfield, until implementation of the release requirements from CT DEEP's updated Stream Flow Standards and Regulations which became effective in 2011 (RCSA 26-141b). These new release requirements are required to begin by 2029 and will supersede the existing regulations and the Agreement with the Town of Fairfield. After 2029 releases from the Hemlocks Reservoir will be consistent with the new regulations.	
39	**Are there similar existing permits in effect for Mill River, Cricker Brook, Greater Bridgeport Region? If yes, please describe.**
Withdrawals from the Easton Reservoir on the Mill River and Hemlocks Reservoir on Cricker Brook are authorized as registered diversions under the Diversion Policy Act and therefore do not have diversion permits. This application requests to authorize the transfer of water between the Greater Bridgeport and Southwest Fairfield County Region service areas. Withdrawals from the Greater Bridgeport System sources will remain below their currently authorized withdrawal rates.	
40	**Can the permit be structured for shorter terms in order to require more frequent review of water usage and the downstream impact due to changing climate patterns, conservation, population, etc.**
Aquarion needs to make significant investment in the infrastructure necessary to increase the capacity of the SWRP to achieve the requested diversion permit rate. The 25-year diversion permit was requested in order to justify that investment and to ensure adequate water supply to the region into the future. The Connecticut Department of Public Health (DPH) requires that Aquarion demonstrate adequate public water supply for the region over a 50-year planning horizon. Because it takes a significant amount of time and effort to develop and permit new sources of water supply, and the consequence of not having adequate supply are severe to the region, long-term water supply planning is critical. A 25-year permit supports this type of long-term planning. As demonstrated in the application, annual average demands in the SWFCR have ranged from 31 – 35 mgd over the past ten years. The demand projections on which the application is based suggest demands of 34.4 mgd in 2030 and 35.75 mgd in 2045. This is not significant growth. Shortening the permit period would not equate to a significant difference in the projected demand, and therefore the required permit rate. It should also be noted that approving the requested diversion rate of 14.2 mgd does not mean that 14.2 mgd will be transferred down the pipeline every day. Providing water from the SWRP is more expensive than producing it locally so Aquarion has incentive to minimize its use. When local reservoirs are full, and during non-drought years, transfers down the pipeline will be less than the anticipated annual average need and less than the authorized rate, even on a maximum day. If changing climate patterns, conservation, and population changes result in the need for less water in the region, less water will be transferred.	

41	**Will additional conservation measures for the SW CT systems be implemented as part of the permit requirements before diverting water? Example, restricting lawn irrigation to once weekly.**
Aquarion is committed to implementing its water conservation plan as outlined in its Water Supply Plan and in this diversion permit application. The primary elements of that Plan are public education and continued enforcement of the first-in-the-State two-day irrigation restrictions in the Southwest Fairfield County Region. Further restricting irrigation to once weekly in this Region (except in response to drought) would be inequitable, overly restrictive and potentially have negative impact on lawn health.	
42	**Why are usage projections increasing despite conservation measures?**
See response to Question 10. The increased capacity requested is based on addressing an existing supply deficit, the expected reduction in available water, and projected system growth which offset potential savings from conservation.	
43	**Will this be permitted with an individual permitting process rather than a general permit which will ensure that all constituents can have their concerns heard and addressed?**
The current diversion application is for an Individual Permit.	
44	**What is the percentage of water the southwestern region be receiving will be allocated for essential vs luxury use? (watering lawns and filling pools vs household use like food, cleaning, etc.)**
Aquarion does not allocate water from the Southwest Regional Pipeline to essential vs luxury usage.	
45	**Aquarion's presentation implied that potentially all of the water requested could be drawn from the currently inactive Housatonic Wellfield in Shelton. Why is water being drawn from so many other sources if the wellfield can provide a sufficient water supply?**
The SWRP is connected to the Greater Bridgeport System in Wilton and will therefore draw supply from the sources in the western portion of the system. The Housatonic Wellfield is located on the eastern edge of the system along the Housatonic River in Shelton, approximately 16 miles (as the crow flies) from the supply to the SWRP. Water from the Housatonic Wellfield and can supply water to reduce withdrawals from the sources in the western portion of the System, but cannot supply the SWRP directly.	
46	**Is there potential for an alteration to the Mill River and Cricker Brook stream flow that will affect the requirements placed on the Lake Hills Association for controlling streamflow over the Samp Mortar Dam?**
Aquarion is not familiar with the requirements placed on Lake Hills Association for controlling stream flow over the Samp Mortar Dam, other than those that might be required under the Stream Flow Standards and Regulations. This diversion will have no impact on Aquarion's releases from the Easton Reservoir (which does not supply the SWRP) to the Mill River, nor on its releases from the Hemlocks Reservoir to Cricker Brook and should therefore have no impact on the requirements for controlling stream flow over Samp Mortar Dam.	

47	**Have the future public utility water needs for the Greater Bridgeport regional watershed been calculated and considered in such a way that shows this diversion will not impact our future water usage?**
Yes. Attachment N4 of the Application (Impact on Greater Bridgeport System) demonstrates that the Greater Bridgeport System will have adequate supply to meet projected demands through the 2060 planning period evaluated. These results were summarized in Slide 15 of the public meeting presentation.	
Mary Hogue	
48	**Two years ago Aquarion sought a permit to divert only 1 mgd from the Norwalk River to solve this same problem for the southwest region as well as reducing the amount of water from our region! The Town of Wilton hired lawyers and consultants to help contest it and the permit was withdrawn. Why was this not listed as an alternative AWC investigated – it was a 432 page application that was thoroughly researched and seemed emphatic that it was the correct way to solve the water issued of the southwest region.**
The purpose of the Cannondale Well diversion permit application was not to solve this same problem (see response to Question 77). If it had been approved, the Cannondale Well would have provided supplemental supply to the Greater Bridgeport System and reduced withdrawals from the Hemlocks Reservoir System, but this same Southwest Regional Pipeline (SWRP) diversion permit application would have been required at the same 14.2 mgd rate as is currently being requested in order to authorize transfers from the Greater Bridgeport System service area to the Southwest Fairfield County service area. The Cannondale Well was therefore not an alternative to the SWRP.	
49	**The population numbers AWC uses for this permit show that the southwest region dips slightly for the 25 year period they request for this permit so why would AWC need to double the amount of water that is sufficient now?**
See response to Question 10.	
50	**This powerpoint by Dan Lawrence shows that the towns in the southwest region use well above the national average water usage – why would we create a giant pipeline to provide more excessive water usage?!**
As presented in the referenced slide annual per capita single-family water use in each of the four towns in the Southwest Fairfield County Region is above the national average of 88 gpcd. The same slide also shows that single family water use only accounts for 3% (New Canaan) to 15% (Greenwich) of the total water usage in these towns. Aquarion has aggressively pursued conservation to reduce excess water usage in these towns, and will continue to do so, but the company has an obligation to meet the water supply needs of its customers.	

51	**Most concerning, the Housatonic Wellfields, which have been closed since 2006, are contaminated with nitrates and manganese levels and health effects are deeply concerning. The comments by Aquarion of cost and difficulty remediating the manganese are also concerning. Is all of this necessary? This project will be a large expense to the Aquarion rate payers but what will the rate payers gain?**
See response to Question 22. Aquarion is not aware of elevated nitrate concentrations in the Housatonic Wells. The rate payers will benefit from reactivation of the Housatonic Wellfield because it will improve the reliability and drought resiliency of their supply. It should be reiterated that reactivation of the Housatonic Wellfield at a target capacity of 11.58 mgd is a condition of approval of two existing Aquarion diversion permits and will occur regardless of whether this permit application is approved.	
52	**This year's weather has shown us that in the summer we can expect long periods of dry weather with little rain and in the winter we don't get the snow we used to get so how will we replenish our water systems? We cannot afford to remove so much water from our Bridgeport System to an area that has no place to store it – it is only being moved to be used. We need to learn to live within our means. We need to learn to conserve. How can AWC, municipalities and state law makers work together to create enforceable water conservation measures? How can AWC work with groups like CT-NOFA, the Pollinator Pathway, UCONN Extension Service and so many others to help change the culture towards more organic landcare and less outdoor water need? We MUST find a wat and stop saying its not possible.**
The uncertainty of climate change and its impact on public water supplies further supports the need for an adequate margin-of-safety between supply and demand. Larger reservoir systems like those supplying the Greater Bridgeport System are better able to mitigate changes in rainfall patterns. Regional solutions, like that proposed here, provide resilience that also helps mitigate the risks of climate change. Aquarion has been an industry leader in water conservation in Connecticut and an active supporter of statewide planning efforts such as the Water Planning Council Advisory Group, Water Utility Coordinating Committees and in the Connecticut State Water Plan. The State Water Plan was adopted by the General Assembly on June 5, 2019 and identifies water conservation as a top ten consensus-based priority. The Water Planning Council lead implementation of the State Water Plan recommendations will provide the best forum for creating a consistent, coordinated statewide approach to water conservation with input from all stakeholders.	
53	**The Town of Fairfield has a legally binding agreement with Aquarion from 2007 for specific releases from Hemlock Reservoir that is not noted in this permit and needs to be noted. It is imperative that the Town bring this to their attention and ensure that it is honored.**
The 2007 Agreement between Aquarion and the Town of Fairfield primarily addresses releases from the Easton Reservoir, with the Hemlocks Reservoir utilized as an alternative if requested by the Town. The term of the Agreement is coincident with the Ridgefield Interconnection Diversion Permit and will be superseded by implementation of releases under the DEEP Stream Flow	

Standards and Regulations, required by 2029. Aquarion's reservoir release commitment to the Town of Fairfield has been considered in Aquarion's water supply planning and in the Greater Bridgeport System supply analysis presented in this diversion permit application.	
54	**It looks like the permits that require the Housatonic Wellfields to be re-opened were approved in 2017 with a requirement that the Housatonic Wellfield goes on line within 10 years. It doesn't seem that Aquarion has made any movement to open up or look into opening up these wellfields – could they ultimately just not open them and opt to pay a fine?**
The diversion permits that require the Housatonic Wellfield to be re-activated were approved in June and August 2018. As a condition of those permits Aquarion is also required to submit an annual report to DEEP on progress towards completing the well reactivations. Progress to date has included a conditions assessment of the existing facilities, replacement of the electrical service to the wells, testing of the wells and completion of a Well Water Quantity and Quality review by DPH for four of the eight wells, testing to prepare a Well Water Quantity and Quality review request for the remaining four wells, and an evaluation of alternatives for returning the wells to service as either a raw or treated water source.	
55	**Is there any data on water quality (Housatonic)?**
Water from the wells was historically in compliance with all applicable water quality standards, although naturally occurring manganese concentrations periodically exceeded the secondary (non-health based) standard (see response to Question 18). Recent sampling performed in conjunction with the wellfield reactivation confirms that water quality meets applicable standards. Manganese in these samples were below the secondary standard. Comprehensive water quality data from the wells must be reviewed and approved by the Connecticut Department of Public Health (DPH) before the wells can be returned to service.	
59	**Is there a different classification for water in a wellfield than water in a reservoir, i.e. is there a financial incentive to use wellfield water over reservoir water, perhaps for treatment purposes?**
There is no different classification, or financial incentive, to use water in a wellfield versus a reservoir.	
57	**In the permit application there is a table (N4-1) that has them (Housatonic) reactivated in 2028 but shouldn't they be reactivated no later than 2027.**
The diversion permits that require the Housatonic Wellfield to be re-activated were approved in June and August 2018 and require the wellfield to be reactivated within 10 years, or by June 2028.	
58	**Why were the Housatonic Wellfields closed in 2006?**
Prior to 2006 the Housatonic Wellfield was primarily run to meet peak demands in the summer. System improvements completed around that time enabled demands to be met without operating the wellfield. Due to pumping costs, the wellfield was also more expensive to operate than other Aquarion sources.	
59	**Is there any data on the Housatonic Wellfields to share?**
The Housatonic Wellfield consists of eight stratified drift wells adjacent to the Housatonic River in Shelton. The safe yield of the wellfield is greater than 26 mgd and it has a registered diversion capacity of 21.2 mgd.	

60	**Is there any knowledge as to why the Housatonic Wellfields have so much manganese and nitrate in them?**
The Housatonic Wells are not known to have elevated nitrate concentrations. Naturally occurring manganese concentrations in the wells have periodically exceeded the aesthetic standard, but are not uncommon for wells in Connecticut.	
61	**Has Aquarion submitted a plan on how they will remove these contaminants (manganese and nitrate from Housatonic)? Do they have to do that?**
The Connecticut Department of Public Health (DPH) will review and approve Aquarion's plans for reactivating the Housatonic Wellfield (including plans for treatment) and ensuring that water quality is in compliance with the Public Health Code.	
62	**There is a concern expressed by many that the contaminants will be pumped out of these wellfields (Housatonic) into reservoirs and diluted so much so that "it will no longer be a problem" and fulfill the old adage of "the solution to pollution is dilution". It will take a closed wellfield and contaminated water that feeds 16 towns – could that really happen?**
The Housatonic Wellfield is not contaminated. Naturally occurring manganese concentrations in the wells have periodically exceeded the secondary standard but are similar to, or less than, the concentrations typically found in reservoirs.	
Audubon Society	
63	**The NDDB identifies several species present in the project area that are included on the state list of endangered, threatened and special concern species, and may be impacted by this project. These include Toothcup a rare amphibious herb which is affected by water level fluctuation, Bald Eagle which nests along the shores of all watercourses proposed for impact, Eastern Box Turtle and Wood Turtle. Both turtles have been affected by loss of habitat and inhabit the floodplains which would be involved with this project. Have potential impacts to these and other species of concern been taken into account in the analysis of these plans? Are there plans in place to minimize and/or mitigate any potential negative impacts to these species?**
A natural diversity database (NDDB) review was performed by DEEP as part of this application. DEEP's review identified and recommended protection strategies for the above species, and recommended that Aquarion retain a qualified botanist to develop a conservation plan to ensure that the requested diversion does not adversely impact the Toothcup herb that may be present along the reservoir shores. This permit is not authorizing any construction or site disturbance within an NDDB review area, nor is any anticipated in the SWRP improvement plan except as may be required for pipelines within road rights-of-way. Aquarion is currently working with a biologist to develop a Toothcup conservation plan and will submit it to DEEP as a supplement to our permit application.	

64	**Several NDDB Environmentally Sensitive Areas have been identified along the watershed including the entirety of the Mill River corridor from the Tide Mill Dam through the Samp Reservoir, the entirety of the Easton Reservoir and several other areas through Southport Harbor and the shoreline of the Long Island Sound. The Mill River Watershed contains three EPA recognized Environmentally Sensitive Areas (ESAs), the Easton, Hemlock and Samp Mortar Reservoirs. Have these ESAs been considered and are plans in place to adequately protect them from potential increased seasonal water level fluctuations?**
Except when the reservoirs are spilling in the spring, stream flow immediately below Aquarion's dams is determined by Aquarion's releases. Releases from these reservoirs will not change as a result of this diversion and therefore no impacts are expected on the NDDB ESAs in the Mill River corridor. Releases from the Hemlocks and Easton dams will change to more closely mimic a natural hydrograph in order to comply with DEEP's Stream Flow Standard and Regulations, scheduled to begin by 2029.	
65	**There is also the possible effect on fisheries in the Mill River Trout Management Area which is stocked from the Merritt Parkway to Lake Mohegan. More importantly, the area of the Mill River north from the Merritt Parkway to the Easton Reservoir is recognized as a Class I Wild Trout Management Area, containing wild trout populations. The area is a recreational resource as well and an environmental one. We recognize that more reliable stream flows and an effort to comply with the new DEEP Streamflow Regulations are part of the goals of this proposal and we commend Aquarion for those efforts. Are there contingencies in place if the efforts to stabilize stream flows are not achieved or if the situation is worsened?**
The sources of supply for the SWRP are downstream of the Mill River Trout Management Area and the Mill River Class I Wild Trout Management Area. The requested diversion will therefore have no impact on stream flow or habitat in these areas.	
66	**Finally, the Connecticut Audubon Society is sensitive to environmental justice issues and cannot escape the fact that significant water will be diverted from a watershed serving a largely urban population to a different watershed where much of this precious resource will be utilized to maintain landscaping. The success of the proposed plan hinges on the reopening in 2029 of the Housatonic Wellfields which contain elevated manganese levels and if unsuccessful could lead to reduced stream flows or water shortages in the Bridgeport area in times of drought as well. There are other viable alternatives cited in the permit application which fall within the SWRP watershed plus the option of purchasing water from New York. There is the opportunity for increased enforcement of water conservation initiatives (which proved effective during the 2016 drought). Is the diversion of water from Bridgeport the least damaging alternative within the SWRP watershed?**
None of the alternatives identified to develop new sources of supply within the Southwest Fairfield County Region would provide adequate water to meet the region's needs and therefore all alternatives would still require increased capacity from the Southwest Regional Pipeline. There is also uncertainty regarding the quantity and quality of water available from these alternatives and	

	their environmental impacts, which are likely to be more significant than increased withdrawals from Aquarion's existing reservoirs. Water use restrictions imposed during the 2016 Public Water Supply Emergency were unique short-term measures. Aquarion has applied lessons learned from the 2016 drought to expand its on-going conservation efforts in the region, specifically imposing permanent 2-day/week irrigation restrictions. Continued success of these efforts is important and may reduce the amount of water transferred through the SWRP on a given day or year, but does not eliminate the need for the requested diversion. See Responses to Question 30 regarding the issue of environmental justice and Question 67 regarding reactivation of the Housatonic Wellfield.
67	**What if reopening of the Housatonic Wellfields in 2029 is unsuccessful for some reason; unacceptable pollution levels for example?**
	Water quality from the Housatonic Wellfield has been tested and is in compliance with applicable drinking water standards. There is no reason to expect that reactivation of the wellfield will not be successful. Without the Housatonic Wellfield the Greater Bridgeport System is projected to have adequate supply to meet the State target 15% margin-of-safety through approximately 2045. If, for some unforeseen reason, reactivation of the Housatonic Wellfield is not successful Aquarion would re-evaluate its long-term supply and demand strategies. These plans would be submitted to, and reviewed by, multiple State agencies as part of Aquarion's required Water Supply Plan updates.
68	**What about an increased emphasis on water conservation efforts and education efforts to encourage landowners to reduce the sizes of their lawn areas and replace them with native plantings that require less irrigation?**
	Aquarion is fully supportive of an increased emphasis on water conservation and education (See response to Question 52) across the State and with a particular emphasis on the Southwest Fairfield County Region. Conservation is a critical component of water supply planning for the region, but cannot replace the need for increased capacity through the Southwest Regional Pipeline.
Fairfield Harbor Management Commission	
69	**The Applicant's Public Meeting presentation did not include a discussion of the Proposed Project's potential environmental impacts, including potential impacts on aquatic habitat and fisheries resources in the affected watersheds, nor was there any discussion of proposed plans and measures to mitigate those impacts**
	Except when the reservoirs are spilling during high flows in the spring, the proposed diversion will have no impact on downstream flows (See response to Question 64) and is not expected to have any impact on downstream aquatic habitat or fisheries resources. When the reservoirs are spilling in the spring the need for transfers down the SWRP will be minimized.

70	**The Applicant's Environmental Impact Report asserts that the Proposed Project will have no impact on water quality, wetland habitat, fish and wildlife, and other natural conditions. However, in 2007 the Applicant seemed to express concern that diversions from the Hemlocks Reservoir System could affect the Applicant's ability to comply with DEEP streamflow standards and regulations.**
As demonstrated in the application and summarized on Slide 15 of the public presentation (available on Aquarion's website) , the Greater Bridgeport System is expected to have an adequate margin-of-safety throughout the permit period and Aquarion does not have concerns about its ability to comply with DEEP's Stream Flow Standards and Regulations.	
71	**To what extent have previous water supply diversions affected water quality and aquatic habitat in the Mill River and other Fairfield water courses?**
Construction of Aquarion's Easton and Hemlocks Reservoirs in the Mill River watershed in the early 20th Century have had both positive (e.g. watershed protection) and negative (e.g. flow regime alteration) impacts on the Mill River. Aquarion has not done a detailed study of these effects.	
72	**What are the potential environmental impacts of the Proposed Project that must be evaluated? How have those impacts been evaluated to date? What measures are normally applied to mitigate such impacts as may be caused by water supply diversion projects?**
See responses to Questions 63 and 64.	
73	**Does DEEP agree with the Applicant's statement, included in the Applicant's Environmental Impact Report, that the Proposed Project will have no significant environmental impacts? Has DEEP required additional information from the Applicant to support that assessment?**
DEEP Answer: "DEEP is continuing their review of the application and has made no such conclusion. The typical process is to issue a Public Notice of Tentative Decision to Approve or Deny after the review phase. This notice will also provide for a thirty-day comment period and the option for a public hearing if a petition signed by 25 or more persons is received. Then, after incorporating any comments received and conducting a public hearing if called for by petition, or unilaterally by the commissioner, a final decision would be rendered." DEEP has issued two requests for additional information to date.	
74	**Has the Applicant met all DEEP permit application requirements for addressing potential impacts of the Proposed Project on state-listed plant and wildlife species?**
See response to Question 63.	
75	**Why did the Applicant withdraw the 2018 diversion application for utilization of the Cannondale Well Field?**
Aquarion withdrew its diversion permit application for the Cannondale Well primarily because the operational constraints included in Aquarion's proposed mitigation plan for the wellfield, and the potential for additional constraints needed to address the public's concerns, made the benefit of the increase in supply available from the well not worth the cost of developing it. Aquarion was able to make that decision because the purpose of the well was not to provide additional supply but to provide additional resiliency and operational flexibility.	

76	**If the current Proposed Project is intended to serve essentially the same purpose as the Applicant's 2018 Cannondale Well Field proposal, why is the amount of water now proposed for diversion from the Hemlocks Reservoir System substantially greater (almost seven times greater) than proposed for the Cannondale Well Field in 2018?**
See response to Questions 75 and 48.	
77	**If the Applicant was concerned in 2018 that additional withdrawals from the Hemlocks Reservoir System could affect the Applicant's ability to maintain future reservoir releases in compliance with DEEP standards and regulations, why is this not a concern with regard to the Proposed Project that now calls for increased diversion from that same system?**
The Cannondale Well was not needed in order to make releases in compliance with the DEEP Stream Flow Standards and Regulations. A benefit of the well would have been that it could help mitigate the impact of future releases on reservoir storage and drought risk, considering this increased diversion, by reducing reservoir withdrawals during the refill seasons in the fall and winter.	
78	**Does the 2007 agreement referenced above (Town of Fairfield) confer upon the Town a special standing in the matter of the Proposed Project now being reviewed by DEEP?**
The Diversion Policy Act and associated regulations do not provide any party with special standing in review of a diversion permit application. The Town of Fairfield can review the application, provide comment to DEEP, and request a formal hearing on the application, as can any member of the public.	
79	**Insofar as the 2007 (Fairfield) agreement was based on the principle of requiring downstream water releases to mitigate potential adverse environmental impacts caused by a water supply diversion, why should the same principle not be applied in 2020 with respect to the Proposed Project?**
The 2007 Agreement was negotiated between Aquarion and the Town of Fairfield and provides for releases from a reservoir unassociated with the requested diversion authorization in exchange for the Town's support of Aquarion's application to divert water from its Greater Bridgeport service area to its Ridgefield service area. The Proposed Project will not impact flows downstream of Aquarion's dams so there will not be adverse environmental impacts to mitigate, nor the need for downstream releases beyond those required by DEEP's Stream Flow Standards and Regulations.	
Nancy Wilcox	
80	**Aquarion has responded to the complaints of customers in wealthy communities by asking for permission to divert water to them from Greater Bridgeport. I believe that this is a problem for wealth communities to solve themselves, rather than take resources away from the much poorer community next door. This is an issue of social justice. Let's consider that in towns like New Canaan, Darien and Rowayton glorious lawns and gardens help support higher property values, which can help generate increased tax revenue to fund already excellent public schools and services.**
See response to Questions 30 and 91. This is not an issue of social justice. The sources of water being diverted to the SWFCR are in Fairfield, Easton, Weston and Redding and the application	

demonstrates that there is adequate supply to meet the current and future needs of Aquarion's customers in both the Greater Bridgeport System and the SWFCR. It should also be noted that this project is not being implemented in response to customer complaints in wealth communities. It is being proposed by Aquarion to meet its obligation to provide an adequate supply of water to its customers as required by the State Public Health Code.	
81	**Let's talk instead about placing restrictions on water consumption for maintaining the estates and lawns of Southwest Fairfield County. Let's talk about planting native plants that aren't as thirsty as plants the evolved elsewhere in damper climates and need an unnatural amount of water to survive and thrive. Let's consider that wealthy gardeners are asking their poorer neighbors to enable them to landscape without regard to the plants that are best suited to survive in our climate zone.**
See response to Question 68. Aquarion is committed to promoting conservation by all of its customers and has focused its efforts in Southwest Fairfield County. Aquarion also supports the State's conservation efforts through initiatives like the State Water Plan that encourage all residents to use water wisely.	
82	**For every gallon of water diverted to water the lawns and gardens and estates of Southwest Fairfield County, the communities in Southwest Fairfield County will send an amount of money to support the public schools and services in Greater Bridgeport. Or should we just let the rich keep taking more and more advantage of the poor?**
See response to Questions 30 and 91. This is not an example of the rich taking advantage of the poor. There is adequate water supply to meet all of Aquarion's customer's needs. This project is a regional solution that brings water from where it is available to where it is needed. It should also be noted that, although water rates may increase due to the required investments in upgrading the SWRP, there will be no direct cost to the communities in the Greater Bridgeport area as a result of this project, nor will there be additional revenue generated for the communities in the SWFCR.	
Jon Friedwald	
83	**Do plans include a third party performing water quality monitoring pre and post diversion in the watershed from which this water will be diverted? If so, how long post diversion will this monitoring be performed? Should those results be unfavorable, will Aquarion be liable for remediation?**
The diversion is not expected to have any impact on water quality within the watershed (See responses to Questions 64 and 69). A watershed water quality monitoring plan is therefore not necessary or proposed.	
84	**How will Aquarion mitigate turbidity and other water quality issues during the construction period (not just post diversion) in the watershed from which this water is being diverted?**
This permit is not authorizing any construction within the watershed from which the water is being diverted. Yet to be designed improvements necessary to achieve the requested capacity of the SWRP will primarily consist of new water mains to be constructed in street rights-of-way in Darien, New Canaan, Wilton, Westport and Fairfield. A new pump station at the site of the existing	

Hemlocks Water Treatment Plant is also anticipated. It has not been determined whether this pump station will be able to fit within the existing treatment plant or will require construction of a new structure on site.	
85	**What wildlife impact will this have upon the downstream watershed from where this water is being diverted? Has a study of at risk or endangered species been performed?**
See responses to Questions 63 and 64.	
Save the Sound	
86	**Water conservation is key to future water use projections and planning. What conservation measures did Aquarion use in determining the need to nearly double the existing diversion? Were existing 2 day/week water use restrictions included in the calculation? Were other conservation measures included? If so, please explain. If such conservation measures were not included, please explain why they were omitted from consideration.**
See response to Question 10.	
87	**Aquarion stated that it will be able to meet minimum streamflow requirements in 2029 even with the extra withdrawal requested. Will Aquarion be able to increase base flows in the streams of the four receiving towns?**
An objective of this project is to be able to meet the release requirements of the Stream Flow Standards and Regulations from Aquarion's reservoirs in both the Greater Bridgeport (donor) and Southwest Fairfield County (receiving) regions, and to reduce the frequency of cutting back on those releases due to drought restrictions.	
88	**Will Aquarion monitor stream flows under the existing permit?**
Aquarion will be required to monitor stream flow releases from its reservoirs, including those impacted by this diversion permit, under the DEEP Stream Flow Standards and Regulations.	
89	**Are there indications from USGS gage data that flows below the existing reservoirs and well systems have periodically resulted in lethal low flow events or dewatered channels? What measures are and would be taken to avoid these conditions?**
Compliance with the DEEP Stream Flow Standards and regulations will ensure ecologically protective flows below the existing reservoirs. Aquarion is not aware of USGS gage data indicating lethal low flow events or dewatered channels on the Saugatuck River downstream of its wellfields. Withdrawals from the wellfields, particularly during low flow periods, are not expected to change as a result of the requested diversion and therefore will not have an impact on low flows below the reservoirs and well systems.	
90	**Have brook trout populations decreased in the Bridgeport basin and, if so, what is the likely cause?**
Aquarion cannot comment on recent trends in brook trout populations in the Bridgeport basin, however this diversion is not expected to have any impact on stream flows or trout populations in the region.	

91	**Access and equity for everyone is critical for all activities. Since Bridgeport is included in the "donor basin," since it is racially diverse and has a large number of low income residents, and since Aquarion's capital expenses are distributed over its entire rate base, what thought was given to developing a mechanism for compensating Bridgeport? This is particularly relevant since the diverted water will be sent to the wealthiest area of the State, and an area of high volume water usage.**
See response to Questions 21 and 30. The Southwest Regional Pipeline helps provide public water supply access and equity for all Aquarion customers throughout Fairfield County. Aquarion's rates are authorized by the Public Utility Regulatory Authority (PURA) based on capital investment and operating expenses throughout Aquarion's service territory. The cost for improving supply to the SWFCR are spread among all Aquarion customer in the same way as the costs for constructing treatment plants, replacing aging infrastructure and improving service quality in the Greater Bridgeport region. Aquarion offers a number of financial assistance programs to help eligible customers who are having difficulty paying their water bills and does not believe that it would be appropriate to subsidize its customers in the City of Bridgeport with increased rates from customers in western Fairfield County.	
92	**In case of a water shortage in any of the communities in the "donor" region, possibly due to contamination, drought, or water system failure, can the water flow process be reversed and, if so, how?**
The flow of water through the SWRP cannot be reversed without emergency pumping infrastructure and authorization from the State under either the Diversion Policy Act or a Public Water Supply Emergency declaration.	
Terrell	
93	**Has Aquarion contemplated the ecological impact of diverting an additional 7 million gallons of water from Hemlock Reservoir per day?**
See response to Questions 63 and 64.	
94	**Can Cricker Brook and Mill River continue to provide safe habitats for fish and wildlife if they dry up?**
Flows in Cricker Brook and Mill River are not expected to change as a result of the requested diversion.	
95	**If water levels drop in Samp Mortar Reservoir the dam at Samp Mortar Reservoir may be forced to release less water downstream which will negatively impact wetlands ecosystems downstream of the dam along Mill River all the way down to Long Island Sound. What will happen to the water quality in Samp Mortar Reservoir?**
The water quality or quantity in Samp Mortar Reservoir is not expected to change as a result of the requested diversion.	
96	**What will be the localized impact to the Greater Bridgeport System when we divert over 7 million gallons away to a different part of the state?**
Attachment N4 of the Application (Impact on Greater Bridgeport System) demonstrates that the Greater Bridgeport System will have adequate supply to meet projected demands through the 2060 planning period evaluated. These results were summarized in Slide 15 of the public meeting presentation.	

Mike Widmer	
97	**The Mill River Wetlands Committee is concerned about the impact of this diversion on stream flow. Specifically, in regard to stream flow from the Hemlocks Reservoir into the Cricker Brook which is an important tributary of the Mill River. Have there been any recent studies prepared that address the impact of this additional diversion on stream flow specific to the Mill River, its trout breeding grounds, and the downstream ecology?**
See response to Question 1.	
Lawrence Ratner	
98	**I live along Cricker Brook and Samp Mortar Reservoir. Currently Aquarion releases almost no water to the stream below and it continues to have a negative affect on the stream. We keep hearing that there is no available water to release and yet we once again are seeing more water being transferred to other communities for the pure profit of Aquarion. I would like to see more water released to better maintain the natural environment.**
Aquarion currently releases water from the Hemlocks Reservoir to Cricker Brook in compliance with DEEP Minimum Stream Flow Standards (RCSA 16-141a). Prior to March 2029 these releases will increase and vary seasonally in accordance with DEEP's more recent Stream Flow Standards and Regulations (RCSA 26-141b). These releases are not expected to change as a result of the requested diversion.	
Tim O'Connor	
99	**What is the service population for the GB System. and Usage per day per person by towns in both GB and SW systems?**
The Greater Bridgeport System serves a population of approximately 375,000 and the Southwest Fairfield County Region serves a population of approximately 210,000. See response to question 17 for information on per capita consumption in both regions.	
100	**What release requirements for GBSystem eff in 2029 - impact for SW System was mentioned but not for GBS.**
The DEEP Stream Flow Standards and Regulations will require releases from the reservoirs in the Greater Bridgeport System by 2029 in the same way that releases will be required for reservoirs in the Southwest Fairfield County Region. The safe yield of the reservoirs in the Greater Bridgeport System is expected to be reduced from 57.2 mgd to 52.9 mgd as a result of these increased releases. This impact was considered in the Application and on slide 15 in the public presentation that demonstrates that the Greater Bridgeport System has adequate supply to meet demands considering these increased releases and the Housatonic Wellfield reactivation required by existing permits.	
101	**Any progress on moving BPT trash incinerator from fresh water to white water or storm water to free up fresh supply?**
If Wheelabrator elected to utilize an alternative water source for the trash-to-energy plant in Bridgeport it would reduce demands in the Greater Bridgeport System, but would not impact the need for the SWRP or this diversion permit application. Aquarion has discussed this alternative with Wheelabrator in the past and is in the process of re-starting those discussions.	

102	**Any plans/efforts to push for irrigation on major plots or major industrial users using white/storm water or local wells vs Aquarion Fresh supply?**
Aquarion supports the Connecticut State Water Plan recommendation to identify methods to encourage the use of Class B waters for non-potable uses (Section 5.3.2.7) and will support the State in developing an approach for implementation.	
103	**Can the Incremental costs be borne by the towns who use excess beyond human consumption thresholds. With users charged in tiers for excess usage. Using the upcharge for these system transfers to enable funds to invest in system improvements (stop leaks) and reducing base costs for first hundred cubic feet per month for residents.**
Aquarion's rates are authorized by the Connecticut Public Utilities Regulatory Authority (PURA). Aquarion anticipates proposing inclining block rates such as those suggested in its next rate application to PURA. This approach would not impact Aquarion's overall revenues, but large residential water users (not towns) would pay more per gallon for their consumption above a given threshold than customers who use less water.	
104	**Storm movement has major differences in local rainfall and therefore impact on watershed supply - how is Aquarion incorporating that into supply planning.**
As required by regulation, the safe yield of Aquarion's reservoirs is based on the annual average withdrawal rate that can be sustained during a historical 1:100-year drought while just emptying the reservoirs before refilling. Changing quantities and patterns of rainfall will have an impact on reservoir safe yield. The safe yield in smaller storage reservoirs is likely to be more adversely impacted than larger storage reservoirs because they are more susceptible to shorter high intensity droughts and are less likely to be able to capture the runoff from higher intensity spring storms when they are already full. Aquarion is incorporating the uncertainty of climate change impacts into supply planning through projects like this one that increases regional water supply resiliency by providing the capacity to move water from areas with greater supply and storage to areas with greater need. Climate change is also likely to impact customer demands and demand patterns. Aquarion's conservation efforts are therefore also an important part of its water supply planning for climate change uncertainty. Finally, the uncertainty of climate change impacts on both supply and demand means that we need to be conservative in our planning efforts and make sure that we have adequate resiliency and margin-of-safety between available supply and projected demands so that systems can meet a broad range of climate change scenarios.	
105	**Deeper reservoirs loose less to evaporation as % of storage, doesn't that have value in the supply equation for reservoir rehabilitation?**
These factors were considered when estimating the increase yield available from increased reservoir storage.	

Rep. Joe Gresko	
106	**Will the existing diversion pipeline need to be expanded in capacity…or will increasing the flow suffice?**
Aquarion's application presents a five phase plan for expanding the capacity of the SWRP infrastructure. Phase 3 is currently under design and expected to be complete by 2025. Phase 4, which will bring the maximum daily capacity of the pipeline up to the 14.2 mgd requested in this application, is planned for completion around 2029. This phased implementation plan is also presented on Slide 12 of the Project Presentation available on Aquarion's website.	
107	**Will Aquarion be increasing their conservation efforts?...ie capturing runoff, porous surfaces, rain barrel distribution…which would assist municipal treatment facilities as well as increasing water volume for diversion**
Aquarion's conservation strategies are focused on reducing public water supply use, in particular for outdoor irrigation. Aquarion's conservation program does include a Rain Barrel Promotion to encourage a general conservation ethic among its customers.	
108	**How will the Housatonic Well Field be treated for contamination? Although PCB clean-up is occurring upstream, there are water quality concerns with Housatonic River water.**
Currently planned treatment will include manganese removal, disinfection, corrosion control and fluoridation. There is no known contamination in the Housatonic Wellfield. PCB contamination is considered a low risk for the Housatonic Wells. The PCB contamination and remediation in the Housatonic River has primarily focused on upstream reaches near Pittsfield MA. PCB's are generally insoluble and therefore found in the river's sediment. Dams along the river between Pittsfield and Shelton, and the soil between the river and the wells, mitigate the risk of contamination to the wellfield. Water quality testing of the wells have not detected PCBs.	
109	**With the 15 billion gallon capacity of the Aquarion reservoirs and the potential reactivation of the Housatonic Well Field, does Aquarion have any intentions to sell excess water to a private bottler?**
Aquarion has an obligation to provide water supply to anyone requesting service within its service area. Aquarion is not aware of any pending or planned service requests from a private bottler.	
S. Hock	
110	**What is the permit process meant to protect?**
When making a decision on a water diversion permit application, DEEP must consider those factors listed in the authorizing statutes and regulations including, but not limited to, the environmental effects of the diversion and whether the proposed diversion: 1) is necessary, 2) is consistent with long-range water resource management, 3) is consistent with the state plan of conservation and development, and 4) will not impair proper management and use of the water resources of the State.	

Elizabeth Dempsey	
111	**Why are your projections showing such a huge demand when there could be a lot done through more conservation, especially with non-Aquarion users that are using our aquifers like the large population of well users in Greenwich that use them for irrigation.**
See responses to Questions 10 and 16.	
Catherine O'Mahony	
112	**What kind of conservation enforcement would you like to see and how can we as environmental groups assist you in getting that done?**
State Water Plan (https://portal.ct.gov/Water/Water-Planning-Council/State-Water-Plan) was adopted by the General Assembly on June 5, 2019 and identifies water conservation as a top ten consensus-based priority. The Water Planning Council lead implementation of the State Water Plan recommendations will provide the best forum for creating a consistent, coordinated statewide approach to water conservation, including enforcement, with input from all stakeholders.	
113	**In the coming decades Connecticut summers will be hotter and dryer. Rising temperatures and shifting rainfall patterns are likely to increase the intensity of both flooding and drought. Climate change is not a factor in the Aquarion permit and we ask that these factors be considered and that Aquarion agree to decrease the length of the permit from 25 years to a much more manageable amount.**
See responses to Questions 40 and 52.	
114	**We ask for Aquarion to put into place and to monitor a USGS gauge to monitor the impact of any diversion on the Greater Bridgeport System.**
See response to Question 14.	
115	**We ask that Aquarion have greater transparency related to the grandfathered diversions that were registered prior to 1984 so that in the future we will have solid environmental impact data when this permit comes up again.**
See response to Question 15.	
116	**How will the cost of the Southwest Regional Pipeline Improvements and Housatonic Wellfield Reactivation impact the State of Connecticut during this time of economic insecurity?**
See responses to Questions 20, 21 and 23. The costs associated with the SWRP improvements and Housatonic Wellfield reactivation will initially be borne by Aquarion. These costs will then be subject to a prudency review by PURA through a formal rate proceeding.	

Robb Sauerhoff	
117	**We need to factor the recovery ratio of the reservoirs into the planning.**
The ability of a reservoir to recover from drought drawdown is considered in calculation of the reservoir's safe yield and available water as required by the DPH Water Supply Plan regulations (RCSA 25-32d-4).	
118	**Why is the requirement for water for the southwestern part of Fairfield County going to double within a 10 year period when it has not done that in the past 10 years?**
The requirement for water in the southwestern part of Fairfield County is not anticipated to double within the next 10 years. See response to Question 10 for the water demand projections utilized in determining the required diversion rate in this application.	
Ray Martin	
119	**The Town of Easton does a lot to protect the watershed for everyone in the region. If Aquarion is going to double the water usage from Easton's reservoirs the Town should be better compensated.**
See response to Question 91. Aquarion appreciates its partnership with the Town of Easton in protecting the waters of the State and the quality of public water supply for the region but is not proposing to compensate the Town as a result of this requested diversion.	