



**San Francisco Public Utilities Commission  
 Citizens' Advisory Committee  
 Water Subcommittee**

**MEETING MINUTES**

**Tuesday, July 26, 2022  
 5:30 p.m. – 7:00 p.m.**

**PARTICIPATE VIA ZOOM VIRTUAL CONFERENCE SOFTWARE**

**Meeting URL**

<https://sfwater.zoom.us/j/84688558161>

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**Meeting ID / Passcode**

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**Mission:** The Water Subcommittee reviews water supply system reliability, water conservation, recycling, regional cooperation efforts and other relevant plans and policies. ([Admin Code 5.140-142](#))

This meeting is being held by Teleconference Pursuant to the Governor's Executive Order N-29-20 and the Sixteenth Supplement to Mayoral Proclamation Declaring the Existence of a Local Emergency Dated February 25,2020

During the Coronavirus Disease (COVID-19) emergency, the San Francisco Public Utilities Citizens Advisory Committee's (SFPUC CAC) regular meeting room, 525 Golden Gate Ave., 3rd Floor Tuolumne Conference Room, is closed. CAC Members and SFPUC staff will convene CAC meetings remotely by teleconference. Members of the public are encouraged to submit their public comment on agenda items in advance of the teleconference meeting by emailing comments to [cac@sfwater.org](mailto:cac@sfwater.org). Comments submitted no later than 12 PM the day of the meeting will be read into the record by SFPUC CAC Staffing Team members during the teleconference meeting and will be treated as a substitute to providing public comment during the meeting. Persons who submit written public comment in advance on an agenda item or items will not be permitted to also provide public comment on the same agenda item(s) during the meeting.

**Members:**

<b>Jennifer Clary (Chair) (D11)</b>	Suki Kott (D2)	Amy Nagengast (D8)
Nicole Sandkulla (M-Reg'l Water Customers)	Eliahu Perszyk (M-Large Water User)	Douglas Jacuzzi (D4)

D = District Supervisor appointed, M = Mayor Appointed, B = Board President appointed

**Staff Liaisons:** Mayara Ruski Augusto Sa, Lexus Moncrease, and Jotti Aulakh  
 Staff Email for Public Comment: [cac@sfwater.org](mailto:cac@sfwater.org)

**OUR MISSION:** To provide our customers with high-quality, efficient and reliable water, power and sewer services in a manner that values environmental and community interests and sustains the resources entrusted to our care.

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**Anson Moran**  
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**Sophie Maxwell**  
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**Tim Paulson**  
 Commissioner

**Ed Harrington**  
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 General Manager



## ORDER OF BUSINESS

### 1. Call to Order and Roll Call at 5:36 pm

Members present at roll call: (4) Clary, Kott, Perszyk, and Jacuzzi

Members Absent: (2) Sandkulla and Nagengast

Staff presenters: Manisha Kothari, Betsy L. Rhodes, and Obiajulu Nzewi

Members of the Public: Peter Drekeimer, Spreck Rosekrans, Phil Lonsdale, Arthine Cossey van Duyne, and unidentified caller

### 2. Approval of the [May 24, 2022](#) Minutes

Motion was made (Kott) and seconded (Jacuzzi) to approve the May 24, 2022 Minutes.

AYES: (4) Clary, Kott, Perszyk, and Jacuzzi

NOES: (0)

ABSENT: (2) Sandkulla and Nagengast

Public Comment: None

### 1. Report from the Chair

- Chair welcomes committee members, staff, and the public

Public Comment: None

### 2. Public Comment: Members of the public may address the Committee on matters that are within the committee's jurisdiction and are not on today's agenda (*2 minutes per speaker*)

- **Spreck Rosekranz** introduced himself as the Executive Director of Restore Hetch Hetchy. Rosenkranz commented that their mission is to supply water and power to San Francisco and all its customers without storing water at Hetch Hetchy and Yosemite National Park.

### 3. Issue: [SF Purified Water Opportunities Study](#), Paula Kehoe, Water Resources Division Manager, Manisha Kothari, Alternative Water Supply Program Manager, Water Enterprise

**Action:** Learn about the findings of the Purified Water Opportunities Study

- *Resource:* [SF Purified Water Opportunities Study](#)

#### *Presentation*

- Briefing on San Francisco Purified Water Opportunities Study
- Reuse Vocabulary
- SF Purified Water Opportunities Study

- Purified Water Scenario Planning
- Purified Water Scenarios
- Purified Water Costs – Capital
- Purified Water Costs – Operations & Maintenance (Annual)
- Sustained Engagement
- Next Steps

*Discussion*

- **Member Perszyk** asked whether it would be feasible to use an existing pump station such as the Mariposa pump station and convert it into a recycled water facility rather than procuring all new land.

**Staff Kothari** responded that she was not managing the recycled water portion of the study and that it was done by the SFPUC's onsite water reuse program. Staff Kothari commented that there was an extensive effort with the SFPUC's Real Estate Division and a consultant to look at properties that the SFPUC or the City owns before considering land that could be purchased, but they did not find anything.

- **Member Perszyk** asked what the anticipated schedule for deciding which project to proceed on was and when would the scheduled environmental review, design, and construction take place. He noted that the alternative water supply report mentioned that the concept was starting construction in 2040 and asked if that scheduled was accurate.

**Staff Kothari** responded affirmatively. She commented that the SFPUC would start with engagement up front, and they would need more district analysis particularly on operation on any of the scenarios. Staff Kothari commented that they do not have water treatment currently in the City, as they currently only have distribution in the City and the SFPUC is looking in that. Staff Kothari commented that currently the SFPUC is looking at operating scenarios, technical scenarios, and costs. She noted that getting information out early and getting feedback from the public was important.

- **Member Jacuzzi** commented that the indirect potable reuse strategy looks like it is not feasible at this time. Jacuzzi then asked whether street grid below pavement percolation zones had been studied.

**Staff Kothari** responded that they have not.

- **Chair Clary** asked whether the SFPUC's limitations on potable water are due to regulations and not just science.

**Staff Kothari** responded they are due to the draft regulations and one important requirement demands that water be stored in a tank for 24 hours before it can be distributed. Staff Kothari added that other issues are related to the NPDES (National Pollutant Discharge Elimination System) permit requirements and the current infrastructure.

- **Chair Clary** commented that the indirect potable reuse regulations need to be updated once the direct potable reuse regulations are adopted. Chair Clary then asked if they could call the SFPUC's storage in the aquifer direct potable reuse.

**Staff Kothari** responded affirmatively. She commented that the period is typically six months but if there is a shorter time period that the water is going to be in the basin or any environmental buffer, then it is

automatically considered direct potable reuse for which the direct potable reuse regulations would apply.

**Chair Clary** asked if direct potable reuse could technically be used for groundwater recharge.

**Staff Kothari** responded affirmatively.

**Chair Clary** commented that the difficulty would be the chemistry explosion and not understanding what would happen with the high-quality water.

**Staff Kothari** responded affirmatively.

- **Chair Clary** asked if the SFPUC considered structuring it as building blocks that start small and build up when looking at the different options.

**Staff Kothari** responded affirmatively and added that they are thinking about hybrids and how they can be phased.

**Chair Clary** commented that another piece of it was the level of debt and trying to handle that through the financial folks. Chair Clary noted that it might be better to start small.

Public Comment:

- **Peter Dreke** commented that he is Tuolumne River Trust's Policy Director and asked if the SFPUC had figures for cost per acre foot for the various options.

**Staff Kothari** responded not yet but that is what they are working on currently. Staff Kothari commented that they are normalizing and looking at the cost the way that they looked at WSIP (Water System Improvement Program) costs, and they will have cost per acre foot.

- **Peter Dreke** asked if the SFPUC had been in touch with Valley Water about public engagement.

**Staff Kothari** responded affirmatively. She commented that the SFPUC is in close coordination with Valley Water, Orange County, and others regarding their efforts on outreach.

- **Peter Dreke** commented that this study only looks at San Francisco but it sounded like the Crystal Springs Project Indirect Potable Reuse was probably the furthest along. Dreke then asked if there were any updates on that.

**Staff Kothari** responded that the feasibility study for the Crystal Springs Purified Water Project is ongoing and should be completed in the next few months. She noted that it was a Title 16 feasibility study, which meant that it had to go to the Bureau of Reclamation for review for potential grant funding. Staff Kothari commented that this project puts somewhere between 6 to 12 million gallons per day of indirect potable reuse into Crystal Springs Reservoir which would then go to Harry Tracy, which is the drinking water treatment plant. She continued that most of that water does end up at Sunset Reservoir, which was considered in the planning for scenario four. She noted that for that study, the SFPUC will be doing a basis of design report in the next year, and that the CEQA (California Environmental Quality Act) process for that project should start in 2023.

- **Spreck Rosekrans** asked whether the SFPUC considered piping water to San Andreas rather than the smaller reservoirs for the San Francisco project.

**Staff Kothari** responded that they discussed it but did not study it because it would be expensive to have new infrastructure as it would require all new pipeline infrastructure to get it to San Andreas and it would not be treated or potable water. She noted that there are other wastewater facilities that have wastewater available and are much closer.

- **Spreck Rosekrans** commented that he thought one big one was easier than many small ones.

**Staff Kothari** responded that it is something the SFPUC discussed, and it is something they might study.

- **Spreck Rosekrans** asked that regarding where the water might go by reservoir and side of the City, was that assuming that people would be less enthusiastic or more enthusiastic about receiving this water.

**Staff Kothari** responded that this was based on feedback from other places where purified water had been implemented. She noted that the SFPUC wanted to make sure that they were studying a range of possibilities, which is one of the reasons why there was no specific recommendation made in the study. Staff Kothari commented that to some people it was the best quality water while others disagreed. She added that their experience with the local groundwater project informed them that people have many questions about any new water supply source.

- **Spreck Rosekrans** asked what costs were related to O&M (Operations and Maintenance). Rosekrans asked whether that was the annual cost of producing however many 43 million gallons per day and if the other cost was the assumption for just building the infrastructure to begin the project.

**Staff Kothari** responded that the first slide covered capital costs, which was just building the infrastructure. She commented that the O&M costs were everything from staffing, chemical, membrane replacements, analysis, testing, to regulatory reporting.

4. **Issue:** [San Francisco Local Groundwater Supply Project](#), Obi Nzewi, Groundwater Program Manager, Water Enterprise

**Action:** Get an update on local groundwater supply

*Presentation*

- San Francisco Local Groundwater Supply Project
- Why Groundwater
- San Francisco Groundwater Project Overview
- SF Groundwater Project Phase 1
- Phase 2 Project Facilities
- Phase 2 Project Facilities Continued
- General Project Operation

- Typical 2021 Groundwater Production Rates
- Groundwater Levels
- Groundwater Monitoring
- Water Quality
- SFGW Impact on Lake Merced
- SFGW Summary
- Questions

*Discussion*

- **Chair Clary** provided a link to the latest blend report: [https://sfpuc.org/sites/default/files/programs/local-water/220715\\_SFGW%20Blend%20Report\\_Final.pdf](https://sfpuc.org/sites/default/files/programs/local-water/220715_SFGW%20Blend%20Report_Final.pdf)
- **Member Perszyk** asked how the Staff Nzewi's group worked with the green infrastructure group specifically in relation to the benefits of green infrastructure projects and how those are integrated with ground water levels and identifying the benefits. He commented that if they could bring more storm water into the basin, it would benefit the groundwater project.

**Staff Nzewi** responded that this was all in the Wastewater Enterprise and that his group does work closely with them. He noted that green infrastructure projects are concerned with design and building. Staff Nzewi commented that they would prefer to have as much infiltration as possible.

- **Member Jacuzzi** commented that it would be a good idea to look at basin levels and Lake Merced levels going much further back than 2005, particularly to look at levels before the building up of combined sewer systems and well beyond that. Jacuzzi noted that the lake was much higher in the 1960s and would encourage a longer view on the levels of the aquifer corresponding to the lake.

**Staff Nzewi** responded that the SFPUC has been monitoring the groundwater basin full scale since 2001, which would be the wells they have installed from Golden Gate Park to Millbrae. Staff Nzewi commented that they have records for Lake Merced going back to 1926 which show that for certain periods the lake was a bit higher. He noted that the lake was used as a drinking water source because it was cut off from the ocean. He commented that with the combined sewer, they have cut off all runoff into the lake except for a small strip around the path that runs around the lake which contributes to a small amount of drainage into the lake. Staff Nzewi commented that the SFPUC got the golf courses off ground water and provided them with recycled water to address the lake levels. Staff Nzewi noted that they have also been working on the Vista Grande project with the City, which involves trying to collect some of the old watershed of Lake Merced in Daly City back to the lake. Staff Nzewi commented that the SFPUC is looking at ways to increase lake levels and he hoped it would be something they could achieve in the near future.

- **Member Jacuzzi** commented that he would want the SFPUC to consider a larger buffer within their groundwater zone, which affects Lake Merced. Jacuzzi also noted that there is no definitive evidence of saltwater intrusion even though it is a huge problem up and down the coast. He commented that he would want them all to consider a much larger zone of comfort regarding the quantity in their largest reservoir, which is the Westside Basin Aquifer.

**Staff Nzewi** responded that they want to nip saltwater intrusion before it starts because it is hard to reverse saltwater intrusion. He commented that to provide enough of a buffer, the SFPUC has a monitoring program with wells lined along the coast from Golden Gate Park to Lake Merced. Staff Nzewi explained that they can modify pumping to avoid intrusion. Staff Nzewi noted that they are ramping up pumping slowly to see if it matches the modeling. Staff Nzewi explained that the goal is to operate this in as much of a sustainable manner as possible.

- **Member Kott** commented that she appreciated that is easier to navigate to groundwater on the website.
- **Chair Clary** agreed with Kott. Chair Clary commented that the blended water report still had small print. She noted that the SFPUC was doing everything in parts per million, but generally these parameters are regulated in parts per billion. Chair Clary recommended that the decimal point be moved over three places to make it easier for the general public to read and compare the values. She noted that the Sutro Reservoir had high levels of manganese in the blended-out flow in the blended water report. Chair Clary then asked whether the SFPUC had any customer complaints about water quality or discoloration because even though the secondary contaminant level for manganese is 50, impacts to water quality color and odor can be seen with a level as low as 15.

**Staff Nzewi** responded that they have not had any persistent complaints or issues, but he would confirm it with the water quality group because they would handle such complaints.

- **Chair Clary** responded that she would appreciate receiving the information about the level of manganese in the blended-out flow from the water quality group. She commented that during the last presentation, the CAC asked what the actual numbers were for drinking water and water quality impacts. She noted the maximum contaminant levels were being used which would not be used in an operational sense because the source would be taken offline before it got above 80 to 85% of the MCL (maximum contaminant level). Chair Clary commented the SFPUC's messaging to the public is that they will provide water that exceeds drinking water standards, which she would like to be quantified. Chair Clary believed that it was quantified last year, but it is not showing up in the blended water report, so there might need to be a water quality presentation following up on this.

**Staff Nzewi** responded that some of the figures that come after the first page of the blend report show the actual concentrations of some of these compared to the actual MCLs.

- **Chair Clary** suggested adding a line below the MCL that is the operational line. Chair Clary commented that she does not want water that is at 90% or 80% of the MCL. She noted that she would want it to be at the response level, which is 50% of the MCL. Chair Clary commented that she would write a resolution if she needed to because she has been asking for this for years. She noted that she would like the SFPUC to set drinking water goals that exceed their drinking water standards and set them at the state response levels. Chair Clary commented that she would like to see them live by their commitment to exceed drinking standards.

**Staff Nzewi** responded that this should be shared with the water quality division. He commented that the compliance level is the MCL and that the SFPUC does have an internal operational goal of 40% MCL. Staff Nzewi commented that if they are saying they are meeting state requirements, then they do want to show the MCL.

- **Chair Clary** commented that her suggestion is that a second line be added to show the operational goal.

**Staff Nzewi** responded affirmatively.

- **Chair Clary** commented that they should think about having a joint meeting with the Wastewater Subcommittee about green infrastructure.

Public Comment:

- **Arthine Cossey van Duyne** commented she is a resident of the Westside and she runs a project finance advisory firm called Water Funder. Duyne asked if this managed by SGMA (Sustainable Groundwater Management Act) since there are so many different users inside the Westside basin.

**Staff Nzewi** responded that SGMA does not apply to them because the Westside basin is not a priority basin, and the State Water Resource Control Board ranks basins based on certain priorities. Staff Nzewi noted that they were focusing on basins that were specifically in trouble or have significant issues with them. He continued that the Westside basin is not a priority basin, which meant that a groundwater sustainability plan was not required but one had been prepared in draft form. He explained that the SFPUC does not need a GSA (groundwater service agreement) because it is just the City and County of San Francisco in the entire Westside basin.

- **Arthine Cossey van Duyne** commented that they are in a drought and current behaviors are not reporting any impact. Duyne asked what the long-range plans were for groundwater, what thresholds were set for resiliency, and whether there was a package or bundle of discoverable projects that all fit together to build up the long-range resiliency plan.

**Staff Nzewi** responded that this was unfortunately not the first time they had a drought, and they have been monitoring the basin for over two decades now. Staff Nzewi then explained San Francisco's history of pumping groundwater and how they are slowly increasing production with two more wells by the end of next year. He commented that they are not pumping the wells at their full capacity. Staff Nzewi commented that the SFPUC will not be exceeding the total of one MGD production until they report to the Commission again, so there will be an update on how the pumping has gone.

- **Arthine Cossey van Duyne** commented that there seems to be a number of different management projects that are being pulled together. Duyne asked whether there was one place, such as a management plan, that lists all the scenarios and projects that are in motion to ensure that they are long reaching. Duyne asked that assuming they run into a 10- or 12-year drought with no surface water coming down, what are the long-range plans for management of the



basin and what projects are lined up in one place for the community to see.

**Staff Nzewi** responded that there are no guarantees with what will happen with climate change because all the projections indicate various reduced levels of precipitation compared to what they have seen in the past. Staff Nzewi noted that the groundwater project at its max yield will be around four MGD, and the current supply to the City is in the range of about 60 MGD for use. He commented that the SFPUC is always trying to reduce the conservation. Staff Nzewi noted that while this was an important piece of their supply portfolio, it was a small piece for now. He noted that part of the presentation that Staff Kothari provided discussed the other projects that the SFPUC was looking at to give them more reliability and more tools to address the unknown future. Staff Nzewi commented that the best method they have to see the impact of the project is through ongoing monitoring. Staff Nzewi commented that mitigation measures are listed in the final environmental report document.

- **Arthine Cossey van Duyne** commented that she was hoping to see a long-range resiliency plan for the basin that included recharge strategies.
- **Chair Clary** responded that she agreed and was looking for their groundwater sustainability plan on the SGMA website, but it seemed to have been removed. Chair Clary staff to provide a copy of it.
- **Phil Lonsdale** commented that he lives in the Mission District who volunteers with Westside Water Resources. Lonsdale commented that he wanted to ask about the brakes on the advancement of this project. He noted the capacity of the wells themselves, the potential for adverse effects on the lake and aquifer, and that there were some operational challenges. Lonsdale asked which of those issues posed the greatest threat to the ongoing development of the project.

**Staff Nzewi** responded that the SFPUC has not operated wells in the City in many years, and it is different from what their operators are used to. Staff Nzewi noted at three of the wells, they have run into low levels of EOCs. He commented that this unfortunately can happen in an urban environment where there has been historically unregulated use of various chemicals in the past. Staff Nzewi noted that they can install monitoring wells to see what is happening in the basin and pick a good spot, but they will not know what they find until they start pumping because they are pulling water from areas they may not have been pulling from previously. He commented that this was expected because that is how groundwater works, and that they were looking at projects to address treatment needs. Staff Nzewi noted that he was confident that they could address the operational challenges. Staff Nzewi continued that that the climate was more of an unknown, so they have planned to the best of their abilities. Staff Nzewi commented that based on all the information, they would be able to operate the project in a sustainable manner. He noted that if anything were to change, the SFPUC was nimble enough to address that while still having an additional local source of water that could be a part of their portfolio.

- **Peter Drekmeier** asked how the groundwater storage and recovery project in San Mateo County influenced the water table under San Francisco's portion of the Westside basin.

**Staff Nzewi** responded that it does impact the water table because he did notice some decrease in the water levels of the wells, which is not unexpected considering the extended drought. Staff Nzewi commented that the partners pumping more water also impacted the levels in the City. Staff Nzewi explained that the project allowed the SFPUC to store more water in the southern part of the basin, which has more space for storage because historically there has been more groundwater production from that part of the basin. He noted that the project allowed for more water storage in the southern part of the basin. Staff Nzewi noted that all of it together allows them to have a much more resilient supply.

- **Peter Dreke** commented that the groundwater storage and recovery project was supposed to originally allow for pumping of 8 MGD in drought years which was then lowered to 6.8. He then asked if San Francisco could have 6 MGD for a month in case of an emergency.

**Staff Nzewi** responded affirmatively.

- **Peter Dreke** commented that he thought it was a good argument for the public to show that groundwater is a good thing because it is an emergency water supply. Dreke asked if the numbers were 6 MGD for 30 days in addition to what would be pumped for the three agencies in San Mateo County that would depend on groundwater during periods of drought.

**Staff Nzewi** responded that the production from the local groundwater project is separate from anything the partner agencies in the southern part of the basin, San Bruno, Daly City, and San Francisco were doing. He noted that the local groundwater project was only looking at production in the northern part of the basin within San Francisco. Staff Nzewi commented that the production from the GSR (Groundwater Storage Recovery) project is separate from the production from local projects. He noted that as far as the numbers for the GSR project, it was initially built as a 7.1 MGD dry year delivery project, but that number has been revised down because the SFPUC has had significant challenges with operation, infrastructure, and water quality. Staff Nzewi commented that they are working on getting a revised number that is more realistic.

## 5. Staff Report

- No report from staff

Public Comment: None

## 6. Future Agenda Items and Resolutions

### *Standing Subjects*

- Groundwater
- Water Quality

### *Specific Subjects*

- Emergency Firefighting Water System Update – *tentatively September*
- Green Infrastructure – *to be discussed with Wastewater Chair*

- Budget – *tentatively November*
- Capital Program and Budget (changes) – *tentatively November*
- Integrating Tribal Leaders into SFPUC Land Management Decisions
- State Board Water Rights
- Water Enterprise Environmental Stewardship Policy Implementation Report
- Debate about Bay Delta – Member Sandkulla suggested everyone watch the February 5, 2021 Commission workshop about the Voluntary Agreement
- Affordability
- COVID and Long-term Affordability Program
- Implementation of the Bay Delta Plan Flow Requirement
- Hetch Hetchy Water and Power Division Update
- State Policy and Programs on Affordability or Low-Income Rate Assistance (LIRA)
- Bay Delta Plan and voluntary settlement agreement
- Legislative Update
- State of the Regional Water System Report – Bi-annual report
- Drought resilience: 3-year water supply update
- Water Equity and Homelessness
- State of Local Water Report
- Retail Conservation Report
- Natural Resources and Land Management Division Update
- Harry Tracy Water Treatment Plant tour

#### Adopted Resolutions for Follow Up

- Resolution in Support of a Resilient Water Supply [adopted August 17, 2021](#)
- Resolution in Support of the Southern Skyline Boulevard Ridge Trail Extension Project [adopted April 20, 2021](#)
- Resolution in Support of Interim Emergency Rate Assistance Program and Revised Community Assistance Program [adopted July 21, 2020](#)
- Resolution in Support of Improved Communications Related to the San Francisco Groundwater Supply Project [adopted August 21, 2018](#)
- Resolution in Supporting Stewardship and Public Access in the Redeveloped Lake Merced West Property [adopted on March 15, 2016](#)
- Resolution on Impacts of Drought on System Maintenance and Improvements [adopted January 19, 2016](#)

Public Comment: None

#### 7. **Announcements/Comments** Please visit [www.sfpuc.org/cac](http://www.sfpuc.org/cac) for final confirmation of the next scheduled meeting, agenda, and materials.

- **Chair Clary** commented that SB-222, which would establish a statewide low-income rate assistance program, has been amended. She noted that several water agencies had taken an opposed position, but the SFPUC supported it.

Public Comment: None

#### 8. **Adjournment**

Motion was made (Kott) and seconded (Perszyk) to adjourn the meeting.

Meeting was adjourned at 7:18 pm.