#### Minutes of the Regular Meeting of the Board of Directors of the Sunshine Fire Protection District December 6, 2022

#### Call to Order

The meeting was held at Station 1.

The meeting was called to order at 7:35 PM and a quorum was established.

#### <u>Attendance</u>

Board Members Present: Jean Gatza, Cathy Shoenfeld, Dan Fischer, Dick Smith, John Bauer Others Present: Chief Michael Schmitt, Assistant Chief Henry Ballard, Fire Marshal Michael Johnson, Chief Bret Gibson (Fourmile FPD), Chief Chris O'Brien (Lefthand FPD), Eric Bader, Pat Noyes

Remote: Paul Hourihan, Bruce Honeyman

#### Cistern Policy Followup

A memo passed out from chief and fire marshal. It documenting that there has been a continuing issue for SFPD, including communication issues regarding cistern policies. Jean indicated that the Board needs to follow-up better when issues come up.

Chief: The approach to cistern location policy has have discussed for few months. He has considered other districts policies. There is not a lot of disagreement with the issues that have been raised. When first raised in 2018, the Chief consulted with fire marshal. He feels board can't mandate the policy as the is no expertise on board. Have listed steps proposed for moving forward. Will put something in place in first quarter of 2023 with the eventual plan to publish it. The primary disagreement is whether to have cisterns at private homes and distance from cisterns to houses. What is workable distance? Alan Kirton noted that a primary concern was the calculation of minimum water supply needed for 250 gal/min. There is a disagreement between wildland code vs NFPA code for the amt of water required. It depends on the calculation that is used.

Chief Gibson said that the numbers are outdated with respect to the size and volume of individual residences. Fourmile adopted a code 4-5 yr ago. Standard is 250-500 gal/min baseline, depending on the nature of the structure. He mentioned that costs in city and Pinebrook Hills for tap in fees have increased. Requirements are for 30 min of water for egress and dept response. Requirement for sprinklers increases the amt of water needed. There was discussion about minimum requirement of 30,000 gal. He indicated that can be winnowed down some, depending on the situation. But need to consider other homes around the new one. Sometimes the required amount can be 50,000 gal. as new homes could be a "threat" to the community. It is incumbent on the chief to require new residences to provide the needed capacity. A big question is how to get enough water into the mountain communities. Chief Gibson distributed a document from Steamboat district. It has suggestions about how to get additional water available.

There then was a discussion about what the codes required and which one to follow.

A question was raised: Do the visiting chiefs have a formal plan in place for their districts. They answered they are in the process of developing a comprehensive water supply plan, then will apply that to subdivisions. The latter topic is a complex issue, as there is a need to take into account elevation, remoteness, etc. For example, they can suggest that 3 residences get together and put in joint cistern that would be less in total than for 3 separate cisterns. The fixed amount for a given house is an absolute requirement, but there can be flex situations.

Lefthand policy is that the district is responsible, if home is not within specified distance from a community cistern, they then need to require home owner to put in their own cistern. Remodels also require cisterns to meet the needs of the new construction. Lefthand Chief approves the request and

informs the Board, the Board then has to approve & forward the plan to the county. County has the ultimate approval authority. Fire marshal is the enforcer, county is the prosecutor if there are issues. Fourmile has a fire review board to allow redress for home owners. Chief O'Brien indicated that Lefthand required 1 gal per/sq ft. They have 3 22,000 gal cisterns in their upper district. Those will drain dry for house fire, but are insufficient for wildland fire.

Chief Schmitt indicated that he has looked into what other fire districts do. He then reviewed the water restriction guidelines. Few things are clear. There is a lot of discretion given to fire officials. If resident is more than 1000 ft, then onsite cistern is standard requirement for a wildland or in a rural area. There is a lot of allowance for difficulty in assessing onsite location and other restrictions. The required cistern distance from a residence must take into account that drive is usually below a house, and that access is also needed to the backside of house.

Chief Gibson noted that Sunshine and Fourmile FPDs have worked together to adopt the same approach and same "policy". They will try to put in community cisterns when possible. But often it is not. But community cisterns are not enough for several houses in case of a wildfire.

Guest chiefs left. There was discussion about developing a scoring plan for new locations and if that was possible. Also need to include the community wildfire protection plan in the cistern policy. Should the cistern plan even be called a "policy" given the need for flexibility? It was noted that a government entity, i.e., a Special District Board, is usually the entity that dictates policy. As a next step, the Chief and the Marshal will continue to develop a draft policy and guidelines for review in Q1 2023.

There was also some discussion about how to improve communication among SFPD firefighters and officers.

#### Approval of Minutes

Minutes from the November Board meeting were reviewed.
MOTION: To approve Board Minutes as amended. Motion was seconded and carried unanimously.

#### Treasurer's Report

Treasurer's report was reviewed.

- Board reviewed the checks, credit card charges, profit & loss budget vs actual and balance sheet.
- Started CD for First Internet Bank. Will be setting up a CD at Wells Fargo in the next few days. MOTION: to approve the treasurer's report was made, seconded and carried unanimously.

#### 2023 Budget

Need to publish notice that we are establishing a budget.

There was a comment that we needed to transfer at least \$60K into capital reserve each year to be able to replace existing equipment in the long term.

There were 2 resolutions before the Board. It was noted that we may need to reword the tax levying resolution, paragraph 2 for next year.

MOTION: A motion was made to accept the resolution adopting the 2023 budget. The motion was seconded and unanimously approved.

MOTION: A motion was made to approve the resolution that levied general property taxes for the year 2022 to defray costs of governing the SFPD for the 2021 budget year. The motion was seconded and unanimously approved.

#### Fire Chief's Report - see attached

- New Truck Update: We received the truck and are continuing the driver training. Before we can put the truck in service, we need to have 75% of the firefighters trained on its safe operation and pump. Once that is concluded, which I expect to be in mid to late January, the truck will receive some equipment from 4501 and be put in service. It will serve as the first engine to a car accident, structure fire, etc., and 4501 will be its supply engine.
- There are still questions for Rosenbauer. They did not explain adequately what caused the problem. Also have not yet gotten an explanation regarding the warranty.
- **2. Station 1 phone:** The phone is not working again. A service call has been made.
- **3. Station 2 Doors:** Doors and locks have been ordered. The locks should be shipped soon and will be shipped straight to the door manufacturer, who will then build the doors and ship them with the locks.
- 4. Auxiliary Firefighters for 2023: Eric, Henry, and myself have discussed what we will require from these firefighters in order to be sponsored by SFPD. This will be concluded by the end of the year. Interviews will be conducted in the next few weeks.
- 5. Station 2 West Garage Door (4505): Will open by itself. Drivers must watch that it closes entirely before driving off. A service call has been made

#### **Other Business**

- 2023 Election designated election official (DEO) appointment John Bauer has volunteered to serve in that capacity.
- Radio grant We are participating with multiple other local districts in an AFG grant application for Radio equipment. The cost for the grant-writer will be approx. \$1,500. This is a risk but seems worth the expenditure. There is going to be a requirement to have dual band radios by 2030. This would change what radios need to be purchased. Will know more in the next few weeks.

MOTION: A motion was made to approve the cost of the grant writer. The motion was seconded and approved.

The meeting was adjourned at 10:04 PM.

Attest: Richard Smith

Richard Smith, Secretary

Attachments: Chief's Report, Letter from Eric Bader, Memo on Cistern Policy Issues, Cistern Policy Discussion Outline, Cistern locations with coverage maps, 2023 Budget submittal, Resolution 2022-04, Resolution 2022-05

#### <u>Agenda</u> Other Business

 Cistern Policy follow up discussion – see attached outline for discussion and context – we may need more discussion at subsequent meetings

#### Review/Approve Minutes Review/Approve Treasurer's Report

• Adopt 2023 budget. See attached budget document - this reflects the changes we discussed at the Nov. meeting

#### **Review Chief's Report**

#### Other Business

- 2023 Election DEO appointment John Bauer has volunteered to serve. Thanks John!
- Radio grant We are participating with multiple other local districts in an AFG grant application for Radio equipment. The cost for the grant-writer will be approx. \$1,500. This is a risk but seems worth the expenditure.
- Anything else?



#### Chief Report - Board Meeting 12/06/2022

- 1. **New Truck Update:** We received the truck and are continuing the driver training. Before we can put the truck in service, we need to have 75% of the firefighters trained on its safe operation and pump. Once that is concluded, which I expect to be in mid to late January, the truck will receive some equipment from 4501 and be put in service. It will serve as the first engine to a car accident, structure fire, etc., and 4501 will be its supply engine.
- 2. Station 1 phone: The phone is not working again. A service call has been made.
- **3. Station 2 Doors:** Doors and locks have been ordered. The locks should be shipped soon and will be shipped straight to the door manufacturer, who will then build the doors and ship them with the locks.
- 4. **Auxiliary Firefighters for 2023:** Eric, Henry, and myself have discussed what we will require from these firefighters in order to be sponsored by SFPD. This will be concluded by the end of the year.
- 5. **Station 2 West Garage Door (4505):** Will open by itself. Drivers must watch that it closes entirely before driving off. A service call has been made.

### Calls

BM3, BR2, LH3, BCFD01, 2261, 4361, 4161, 4366, 2331, 4331, 4131, LY1, LY2, SL2, 2360, 4141, SS1, 4061, BM3, 4031, 4105, 4341, 4532, 4132

2, BRUSH A TIL 1200 WCWD UNTIL 13

BCFD221201-014288FIWILR-Wildland/Grass FireBCFD221119-013786FICONR-Controlled BurnBCFD221120-013833FICONR-Controlled BurnBCFD221130-014195FICONR-Controlled Burn

12/1/2022 10:22:53 PM 11/19/2022 07:06:41 AM 11/20/2022 07:07:11 AM 11/30/2022 06:55:55 AM

1 Page Sunshine Fire Protection District 311 County Rd 83, Boulder CO 80302 www.sunshine-fpd.org

			BR2, 2202, SS1, 4566, 4561, 4631,	
BCFD221201-014277	FICAMR-Illeg/Unattend Campfire	12/1/2022 05:22:11 PM	4532 FM4, SS1, 6531,	SMOLDE
BCFD221109-013376	FISMOR-Smoke Report	11/9/2022 03:44:22 PM	4656, 4662, 4631	LIGHT GI
			FM2, SS1, 4664,	
BCFD221111-013460	FIASSR-Fire Assist	11/11/2022 05:31:09 PM	4662, 4603	TRAFF C
BCFD221117-013696	FICONR-Controlled Burn	11/17/2022 10:18:44 AM		ALL DAY
BCFD221117-013711	FIASSR-Fire Assist	11/17/2022 02:13:13 PM	4656	
	UNACCR-Unknown Injury		FM1, SS1, AMRB,	VEH IN C
BCFD221119-013805	Accident	11/19/2022 12:34:16 PM	4661, A4, A4	INJ
			FM3, SS1, AMRB,	
			A14, 4566, 4661,	
BCFD221120-013850	INACCR-Injury or Rollover	11/20/2022 02:54:30 PM	4662, 4501, 4602	RED VEF
	HAZFULR-Hazmat Full Team		4601, 2321, 2751,	
BCFD221201-014262	Resp	12/1/2022 12:32:49 PM	2651, 2257, 2660	
BCFD221108-013327	FIINFR-Fire Information	11/8/2022 02:23:27 PM		LOCKDO
BCFD221113-013533	FICONR-Controlled Burn	11/13/2022 09:15:28 AM		SWEAT L
			GH3, AMRB, A16,	
BCFD221201-014282	zConvulsions/Seizure (AE/EE)	12/1/2022 07:02:46 PM	A23, 5404	34 YOF C
BCFD221119-013790	FICONR-Controlled Burn	11/19/2022 08:42:21 AM		ALL DAY
BCFD221120-013836	FICONR-Controlled Burn	11/20/2022 08:21:42 AM		TIL 1200
BCFD221121-013875	FICONR-Controlled Burn	11/21/2022 08:54:52 AM		WCWD
BCFD221129-014160	FICONR-Controlled Burn	11/29/2022 08:35:46 AM		AG BURN
			SS1, FM3, 2301, AMRB, 4656, A1,	
BCFD221205-014423	zStroke (AE/EE)	12/5/2022 12:40:05 PM	2360, 4561, 4532	60 YOM (

#### To: Sunshine Fire Protection District Board From: Eric Bader, resident Date: December 2, 2022

Sunshine FPD adopted the 2012 International Fire Code (IFC) on April 2, 2015. Per the International Code Council (ICC), the IFC "establishes minimum regulations for fire prevention and fire protection systems using prescriptive and performance-related provisions. It is founded on broad-based principles that make possible the use of new materials and new system designs." The current version of the IFC is 2018, with a 2021 edition due soon. The IFC is one of several building-related codes developed by ICC to ensure safe buildings. One of the exceptions made to the 2012 IFC as part of SFPD's adoption of the code states, "The fire code official is authorized to reduce the water supply requirements based on the District's water supply capabilities and strategic plans." Currently, there is no plan on which to base such a decision.

The 2013 *Community Wildfire Protection Plan* for the Sunshine Fire Protection District considered the importance of a readily available emergency water supply. Section 8.7 of the plan focused on emergency water sources and recommended that "Future plans for SFPD should include a serious study of current water distribution." The plan suggested 16 questions the study should include. To date, that study has not been undertaken by the District.

Boulder County Form W/05 Emergency Water Supply for Firefighting requires a minimum 1,800 gallon cistern or a monetary contribution to a community cistern, for new construction only. It notes that contributions to a community cistern fund in lieu of an private cistern on site "provides the fire district with a more reliable water source, since they have ownership and general control over the use of the community cistern." The National Fire Protection Association's NFPA 1142: Standard on Water Supplies for Suburban and Rural Firefighting, 2022 edition, provides guidance on establishing water supply. The IFC authorizes the use of NFPA 1142 or the International Wildland-Urban Interface Code for information regarding water supply in rural and suburban areas. Section 1.2 of the standard states, "The purpose of this standard is to assist the AHJ [agency having jurisdiction] to establish the minimum water supply necessary for structural firefighting purposes in those areas where it has been determined that there is no water or inadequate water for firefighting." Boulder County's Emergency Water Supply for Firefighting references an earlier version of this standard. It is important to note that Boulder County Form W/05 does not meet the current NFPA standards for placement of a cistern, which should be at least 100 feet from a structure. The IFC and NFPA 1142 include requirements for inspection and testing all cisterns in the District. NFPA 1142 also requires specific record keeping of these tests and inspections. To date, I am unaware of a SFPD program to meet these requirements, or even which standard SFPD is using.

The SFPD Board passed the following motion at their July 2018 meeting: "For new construction we propose the cistern contribution is a flat contribution of \$10,000 regardless of square footage in the structure." The Fire Chief and Fire Marshal have since taken the liberty of requiring this contribution for remodels as well as new construction, and have even required residents to install on-site cisterns as part of a remodel. This was not the stated intention of the Board action. The size and location of these cisterns are determined by the Fire Chief and Fire Marshal, and without a District water supply plan it is not clear what the criteria are for requiring these new cisterns. As a District action that may significantly impact the District's budget and resident finances, it should also be founded on Board policy and implemented consistently and fairly. Such a policy should be clear, transparent, and easily accessible to residents and potential buyers considering construction or reconstruction. Currently the Fire Chief has

the ability to require current and future residents to install cisterns at the cost of \$80,000 or more without oversight, clear basis, or Board action, which opens the District to legal action.

I expressed my concerns to the Chief and the Fire Marshal in 2018 regarding the process for requiring private cisterns. These issues included both operational and administrative/policy concerns. I was told this subject was not to be brought up in a Company meeting. I requested an officer meeting to discuss the issue, the last officer meeting was held November 2017. The secrecy surrounding the Fire Chief and Fire Marshal's requirements is problematic operationally and legally. Because I feel it is important that the District make informed, defensible decisions that impact our residents and our firefighters in terms of safety and financial burden, and because I was not provided an opportunity to work through the issues with the officers, I brought the issue to the Board, as it is as much a policy issue as it is an operational one. For that I was removed as an officer, placed on probation for 60 days, and informed that my status as a firefighter with the department is in jeopardy. I continue to raise these issues to the Board despite the fact I make my living from fire dispatches through SFPD and termination directly threatens my livelihood. I have nothing to gain personally from pursuing this and everything to lose.

Whether or not I am a Sunshine firefighter at the end of the 60 days, I have been a resident of Sunshine for 32 years, served on the fire department for 31 years, and care deeply about the community and the fire department. As a resident with serious concerns about the current approach to requiring residents to incur significant costs for new builds or remodels without basis in policy or an approved water supply plan, and inconsistencies with national firefighting standards, I feel that the current approach is a safety issue, a disservice to our community and a liability for the District. I will continue to bring these issues to light as a concerned resident of the Sunshine Fire Protection District.

SFPD Board
Chief Michael Schmitt, Marshal Michael Johnson
December 5, 2022
SFPD Chief's and Marshal's Position on Cistern Policy Issues

#### **Background**

"Fire suppression depends on the availability of water. As a primary element of a fire protection delivery system, plentiful water resources are the key to effective suppression. Too many times fire departments lamented that they could have saved a structure if they hadn't run out of water."

## <u>Using Water Effectively in the Wildland/Urban Interface</u>, National Wildland/Urban Interface Fire Program

After the Black Tiger fire burned 44 structures west of Boulder in 1989, fire ecologists called for clearing "defensible space" around houses. Most counties have implemented codes that require trimming trees and driveways wide enough for firefighting vehicles.

Now there's a growing emphasis on ensuring adequate water supplies, so that firefighters can try to neutralize embers rocketing out of wildfires. After the 2002 Hayman fire burned 132 homes and 466 outbuildings, hundreds of underground cisterns were installed in the foothills west of Denver, in Boulder County and near high-value homes in Eagle County.

County authorities and fire chiefs typically require people building new homes in forests far from municipal water to install a cistern or provide another water supply....

In Black Forest, where fire burned 486 homes [in 2013], there were 18 community cisterns in place, each holding 30,000 gallons, Black Forest Fire Rescue Chief Bob Harvey said.

Contemporary code in the area requires new houses to have a cistern within 1,000 feet. However, 90 percent of homes in the burn areas were not near a cistern, Harvey said. Firefighters had to haul in water.

Summit County authorities this summer installed four cisterns to help protect high-value houses overlooking Breckenridge.

"A continuous water supply is best, but this is a very good alternative," Red White and Blue Fire Rescue Battalion Chief Dan Bergbauer said. "All the recent fires are telling us that preparation is key."

- "After big Colorado burns, homeowners, communities try to fire-proof," The Denver Post (June 6, 2016)

Water supply is a challenge in mountain districts like SFPD. Water sources are scarce, firefighting resources are limited, and access can be difficult for fire apparatus due to road conditions or weather. With these challenges in mind, SFPD fire chiefs and fire marshals over

the years have devoted substantial attention to the question of whether on-site water supplies should be required when new structures are built in the district.

Neither the International Fire Code (IFC) nor the National Fire Protection Association (NFPA) codes and standards specify <u>how</u> water must be supplied in the WUI–although all authorities agree that a large volume of water should be available if fire suppression in the WUI is to be successful.<sup>1</sup> In general, it is left to local fire departments to determine how best to ensure adequate water supply given the circumstances in their district; there is no one-size-fits-all approach.

In 2021, Bruce Honeyman retired from the position of SFPD fire marshal, a role he filled for almost 25 years. As part of transitioning his responsibilities to new fire marshal Michael Johnson and his deputy, Paul Hourihan, Bruce shared his approach to water supply requirements in a memo that, with input from the marshals and Chief Michael Schmitt, became the "Cistern Placement Considerations" document that is attached to Firefighter Eric Bader's November 3, 2022, email to the board. In it, Bruce starts with safety considerations and then discusses the engineering considerations involved in achieving sufficient water flow.

As set forth in his email to the Board, Eric disagrees with various aspects of the "Cistern Placement Considerations" document, which he incorrectly calls an SFPD "policy." In fact, the document originally was written in response to a specific question about water supply placement on CR 85J and was never intended to be a final policy or SOP for the district. Rather, it was an initial attempt to articulate the factors that were relevant to the assessment of the need for an on-site water supply.

Eric has shared his views on water supply issues with SFPD officers many times over the years. Most recently, in spring of this year, Eric shared his concerns on the topic with Michael J. and Paul. Eric is an experienced firefighter and a former chief, and Michael J. and Paul took Eric's views seriously. After discussions in spring and early summer with Michael S. and Bruce, who had strongly held views different from Eric's, it was agreed that a full discussion of cistern issues, involving Eric and all SFPD officers and considering practices from other fire districts, would take place before any formal policy statement was issued.

The intention was to have those meetings take place after summer vacations, but scheduling challenges and other commitments have not allowed the discussion to occur. Eric, perhaps growing impatient with the process, took the issue to the Board instead, asserting that it is the Board's responsibility to set policies regarding water supply requirements.

<sup>&</sup>lt;sup>1</sup> There are many different methods for determining the flow rate and total volume of water needed for structure fire suppression. As Alan Kirton summarized in his November 2022 Minimum Water Supply Requirements document, there are a number of different methods for determining the flow rate and total volume of water needed for structure fire suppression. In short, our goal is to be able to supply 250 gpm for 2 hours, resulting in a total water demand of 30,000 gal. for a single structure fire.

#### Authority to Set Fire Code Policies and Procedures

As an initial matter, it is important to clarify whose responsibility it is to set SFPD fire code policies.

In 2015, the Boulder County Fire Code Council ratified the SFPD Board's adoption of the 2012 IFC. The IFC provides that a district's fire chief or a fire marshal to whom the chief delegates such authority "shall have the authority to render interpretations of this code, **and to adopt policies**, **procedures**, **rules and regulations in order to clarify the application of its provisions**." The chief and marshal are further authorized "to receive applications, review construction documents and issue permits for construction regulated by this code, issue permits for operations regulated by this code, inspect the premises for which such permits have been issued **and enforce compliance with the provisions of this code**."

Thus, Eric is incorrect in asserting that "[p]olicies should be approved by the board and our current policy has not been" and that "[p]olicies that affect residents financially are a matter of the board." As in all other districts adopting the IFC, the SFPD Board has delegated the authority to adopt and implement fire code policies to the SFPD chief and his fire marshal. Nonetheless, it is important for the Board to understand the rationale behind the chief and marshals' approach to the topic of cisterns.

#### Points of Disagreement with Eric

Much of what is contained in Eric's "Sunshine Cistern Requirements (Proposal)" document is not controversial and reflects the historical and current SFPD approach to water supply and access issues. The actual points of disagreement are limited.

All agree that structures within a tactically manageable distance from an adequately-sized existing cistern do not need an on-site cistern; and all agree that on-site cisterns should be located a safe distance from nearby structures. The main points of disagreement are the following: (1) Eric believes that 2000' feet is a tactically manageable distance to do a hose lay from a cistern, whereas the chief and marshals believe that 1000' is the farthest tactically manageable distance–i.e., in which we can consistently deliver water; and (2) Eric believes that cisterns should be located at least 200' from a structure, whereas the Chief and Marshals believe that cisterns should be located at least 150' from a structure.

In short, Eric's points of disagreement are relatively minor, and boil down to questions of appropriate fire suppression tactics for the SFPD WUI. The chief and marshals' position on these points is set forth below.

#### Process followed by SFPD Chief and Marshal

Before getting into the points of disagreement in detail, it is important for the Board to understand the approach the chief and marshals have taken in trying to develop and articulate a clear and consistent approach to on-site water supply assessments.

First and foremost, Bruce and Michael S. are drawing on their years of experience and lessons learned in SFPD and other mountain districts. In addition, the chief and the current marshals have (1) reviewed relevant fire code provisions; (2) discussed the issues with current SFPD officers; (3) consulted with neighboring fire departments; and (4) researched the practices in WUI districts around the country. These sources all generally disagree with Eric's position on the two issues above.

#### Distance from existing cistern

The question of how close a cistern to the structure it protects is really a question of whether local conditions and tactics enable the cistern to be effectively accessed in a fire situation. It is the view of the SFPD chief and fire marshal that 1000 feet is the maximum distance that can be effectively accessed, and that Eric's proposed range of 2000 feet is neither realistic nor supported by local practice.

SFPD's main structural firefighting engines, 4501 and 4505, carry 1000 feet of supply line. The same is true of Four Mile's and other local districts' structural engines. Thus, if a cistern is within 1000 feet of a structure, a single engine carries all it needs to draft and supply the attack engine. Although it becomes a situation where two engines are needed (as opposed to one engine if the cistern is on-site), it is still a configuration that we can usually manage in our district. To access a cistern 2000 feet away, however, would require additional supply line, personnel, and time to set up–especially where rough terrain is involved. In our view, that becomes a much more difficult water supply situation given district resources, potentially jeopardizing firefighting operations.

The International WUI Code, which the 2012 IFC directs fire departments to "[f]or information regarding watters supplies for fire-fighting purposes in rural and suburban areas in which adequate and reliable water supply systems do not exist," explicitly supports the chief's and marshal's position on this issue. It provides as follows:

**International Wildland Urban Interface Code Section 404 Water Supply 404.2 Water sources.** The point at which a water source is available for use shall be located not more than 1,000 feet (305m) from the building and be approved by the code official. The distance shall be measured along an unobstructed line of travel.

Other Boulder County mountain fire districts concur that 2000 feet is too far for a cistern to be tactically effective in our conditions and that 1000 feet should the appropriate maximum

distance. Specifically, this was confirmed in correspondence with the chiefs of Four Mile FPD and Left Hand FPD.

Furthermore, although research on this issue is still ongoing, the chief and marshals have found substantial support outside of Boulder County for the 1000-foot requirement. For example:

- Cañon City Area (CO) FPD Cistern and Dry Hydrant Requirements ("Cisterns of 30,000 gallons or more may qualify for ISO rating reduction for all structures within 1,000 feet of cistern.");
- Black Forest (CO) FPD Guidance Document for Firefighting Water Supply ("Developments/subdivisions that lack a NFPA compliant water source for firefighting operations within 1000 feet (road feet)" must have a cistern or other on-site water supply.);
- Wilton (NH) Cistern Regulations (requiring plans to show "the location(s) of the cistern(s) and the structure or structures to be protected within *1,000 feet* of each cistern");
- Pelham (NH) Fire Department Cistern Regulations ("Fire Cisterns shall be located at the beginning of every new development, and then every *1000 feet* beyond, as so not to allow for more than *1000 feet* travel distance between the driveway travel distance from any structure on the furthermost lot within a development, and no more than *1000 feet* from one another.").
- The Steamboat Springs (CO) FD recommends a 10,000 gal. cistern not more than *1,000 feet* from the target structure.

In contrast, we are aware of no support from other districts for a cistern requirement based on a distance of 2000 feet, as proposed by Eric.

#### Distance from new cistern to structure

Our engines carry 200-foot pre-connect hoses for rapid deployment in the initial structure fire attack or in search and rescue operations. To be effective in those situations, firefighters must be able to reach the rear of a residential structure with the pre-connects. Given that it is often the case in our district that only one fire engine may be on-scene for a while until supporting units can arrive, a balance must be struck between being far enough from the structure for safety, especially considering structure collapse zones, and being close enough for the initial attach engine to be able to reach the rear of the structure with it 200-foot pre-connects.

Accordingly, the chief and marshal are of the view that 150 feet is an appropriate distance. Placing an engine next to a cistern located 150 feet from the structure would allow for a continuous initial attack to be done with a single engine. In contrast, a cistern located 200 feet from the structure, as proposed by Eric, could lead to a situation where the pre-connects can only reach the front door, preventing interior attack and search-and-rescue efforts; we believe that is an even greater safety risk than the marginal risks associated with placing the engine 50 feet closer to the structure. In that regard, we note that Boulder County guidelines for attack engine placement state that the apparatus should be within *150 feet* of the structure, for the very reasons given above.

#### Exposure to liability

In his November 3rd email, Eric said that SFPD's "current policy is not a standard in the fire industry and is subjective regarding requirements and enforcement." He claims "[t]his opens the district to liability and may be seen as government overreach, particularly as it has not been enforced consistently." Those were inaccurate and irresponsible statements to make.

First, as noted above, there is no "policy" as of yet. We are in the process of defining one.

Second, as the sources cited above demonstrate, the current approach of the chief and marshals is completely consistent with local and national practice. Eric has been asked more than once to provide support for his proposed approach to cisterns, and he has not produced any.

Third, we take issue with any suggestion the approach to cisterns has been handled unfairly. It is true that the approach has evolved over many years, and it is true that each situation may have unique factors that require a case-by-case approach, but over his nearly 25 years as fire marshal, Bruce has developed and applied a consistent, balanced, and fair approach that is based on widely adopted fire codes and grounded in fire science. The approach taken by SFPD is and has always been consistent with the standards articulated by the NFPA, the IFC, and Boulder County, and we are at a loss as to how anyone could claim that it is somehow exposing the district to liability.

#### Plan Going Forward

The authority to set fire code policies is vested in the SFPD fire chief and fire marshal, but the chief and marshal remain committed to having a full discussion of the issues concerning cistern requirements before finalizing any policy on that subject. We do not feel that Board meetings are the proper place to have that discussion, however.

Eric's experience makes him a valuable member of the SFPD community. Although in this particular case we disagree with his conclusions, he does raise a number of valid points that should be considered. There are many other details to work out, as well. We propose to continue the process we were in the middle of when Eric chose to raise this matter with the Board. Specifically, the chief and marshal will:

- Complete their research and create a proposed cistern requirement policy;
- Invite review and comment from SFPD officers;
- Make a determination as to the final policy;
- Publish the policy to the Board and community so that everyone is aware of it and can ask any questions they might have.

We do not believe it is appropriate for theBoard to involve itself in matters of fire code policy generally, and we do not believe it is necessary in this case, where there was already a process under way to take into consideration the views of all SFPD officers, including Eric, whose assertion that he was "not provided an opportunity to work through the issue with the officers" is simply untrue.

#### **Cistern Policy Discussion Outline**

The purpose of this item is to have a discussion and for the board to get more information about how the code for water supply is administered by the fire marshal and chief in order to determine appropriate next steps within our respective roles. The goal of the discussion is not to create or shape policy at this time.

#### **Discussion Topics**

- Report back: Board requested that the Chief and Fire Marshals review concerns raised about:
  - Consistency in application and requirements
    - Is the application of the code being done in a fair, consistent, and safe manner?
    - Is the cost to property-owners out of line?
  - Alignment of code/policy application with plan for community infrastructure
    - How does the requirement for private cisterns align with and support the plan for community cisterns?
- Other concerns for discussion
  - o Industry or regional standards
    - How does Sunshine's application of the IFC align with what other Boulder County districts do?
  - Sustainability
    - What is the ability to test and train on private cisterns?
- Potential <u>Board</u> action or next steps (we may need more than 1 meeting to determine this) these are initial ideas as possible suggestions
  - Work to develop and adopt additional cistern policy and/or plan to further guide decision-making by the Chief and Fire Marshal
  - Develop water supply plan for SFPD as part of CWPP update
  - Develop more community information to increase transparency about the code and its application – website, newsletter, other

## **Context** these are my summary notes of key points from many documents provided and are not fully comprehensive

Colorado Revised Statutes outlines the powers and duties of fire protection districts. Boards have the power on behalf of the district to 'to adopt and enforce fire codes, as the board deems necessary'.

The SFPD Board adopted the International Fire Code (IFC) in 2015 and it was subsequently adopted by the Boulder County Commissioners.

The IFC outlines that the Fire Code Official is authorized to enforce the provision of the code and shall have the authority to render interpretations of this code, and to adopt policies, procedures, rules and regulations in order to clarify the application of its provisions.

#### What the IFC says about water supply

The International Fire Code provides requirements for determining the minimum water supply amount and flow rate. In rural areas in which adequate and reliable water supply systems do not exist, the fire code official is authorized to utilize EITHER NFPA 1142 Water Supplies for Suburban and rural fire fighting OR the International Wildland Urban Interface Code. SFPD included an exception in the adoption of the code for the fire code official to be able to reduce the water supply requirements based on the District's water supply capabilities and strategic plans.

There is a marked difference in the minimum water supply as calculated using the NFPA 1142 vs the International Wildland Urban Interface code. The minimum water as specified by the International Wildland Urban Interface Code is approximately 3 times more than NFPA 1142 as assessed in a few examples (see Alan's analysis of example homes).

#### What CWPP says about water supply

The plan describes the established water delivery system and also outlines challenges. It recommends that the district study the issue and outlines a range of questions that could be addressed e.g. water needs, areas not served, locations of new cisterns, access routes and challenges, other potential infrastructure options, funding, etc.

#### What triggers review of cistern requirement

A review of the fire cistern requirements is triggered by any residential or nonresidential construction which causes a requirement for a Site Plan Review. A Site Plan Review will be triggered by any new construction on a vacant parcel or additions to existing structures greater than certain size limits. As part of the Site Plan Review (SPR), Boulder County defers to the local Fire Protection District to determine whether the fire cistern requirement can be met by a donation to the district's cistern fund or will require a private fire cistern. Using information from the application the Fire Marshal will make a determination as to whether a private fire cistern is required and, if so, then the size and location of the fire cistern. Alternatively, the Fire Marshal can require a donation to the district's cistern fund.

What conditions allow for paying into the cistern fund vs constructing an on-site private cistern

If new construction is within 1,000 ft. of a community cistern, we do not typically require an on-site cistern to be constructed unless road conditions and design don't allow for safe operation. Sunshine has eight community cisterns throughout the District. They are at roughly one-mile separations along SCD (most are 10,000 gallons) and we have a 110,000 gallon cistern at Station #2.

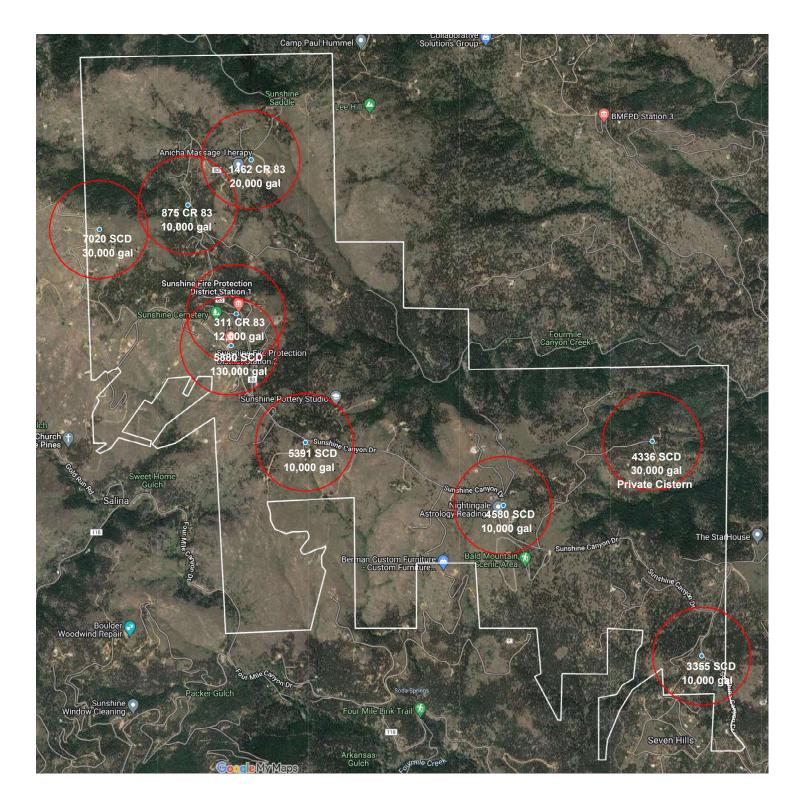
We have roughly 140 homes in the district and there are 50 homes or approx. 35% currently within 1000' of a community cistern or private cistern >= 10k gallons. This does not include any homes that have a private cistern < 10k gallons.

#### Sunshine Fire Protection District Cistern Locations and Homes within 1000'

The following table provides a list of the SFPD cistern locations and the number of homes that are within 1000' of the cistern when measured along roads/driveways. The list contains all community cisterns and those private cisterns greater than or equal to 10,000 gallons. Other water sources, such as pools, are not listed.

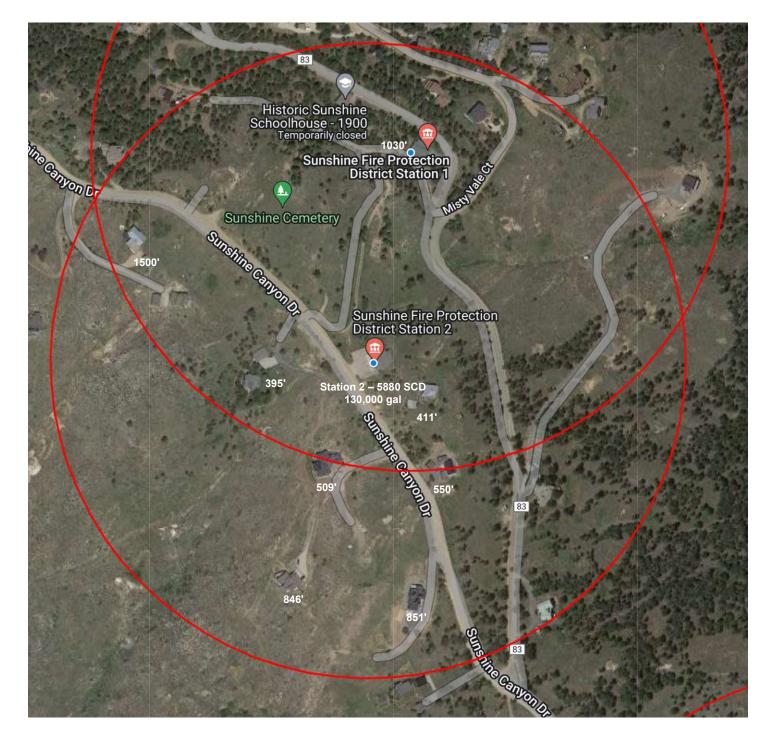
		Size	Homes
Cistern Location	Cistern Type	(gallons)	within 1000'
Station 2 – 5880 Sunshine Canyon Dr.	Community	130,000	6
7020 Sunshine Canyon Dr.	Community	30,000	4
1462 County Rd 83	Community	20,000	9
875 County Rd 83	Community	10,000	7
Station 1 – 311 County Rd 83	Community	12,000	7
5391 Sunshine Canyon Dr	Community	10,000	6
4580 Sunshine Canyon Dr	Community	10,000	4
4336 Sunshine Canyon Dr	Private	30,000	2
3355 Sunshine Canyon Dr	Community	10,000	3
Total			50

The following pages provide maps of the cistern locations and detail regarding the number of homes within 1000' of the cistern as measured along roads/driveways.



SFPD Community Fire Cisterns and Private Fire Cisterns Greater or Equal to 10,000 gallons

Red circles denote a 1000' radius around the location of the cistern to provide a sense of scale. The goal is to have community fire cisterns within 1000' of all homes in SFPD. The 1000' measure needs to be applied along roadways so even though a house may be within 1000' of a cistern it may be greater than that when the distance is measured along roads/driveways. Each cistern location will be examined in detail with distance to houses noted for those houses within the 1000' radius.



Station 2 – 5880 Sunshine Canyon Dr. 130,000 gallon Community Fire Cistern

Distances are given for houses that are within 1000' of the cistern as measured along roads/driveways. There are 6 houses that meet that criteria.



7020 Sunshine Canyon Dr. 30,000 gallon Community Fire Cistern

Distances are given for houses that are within 1000' of the cistern as measured along roads/driveways. There are 4 houses that meet that criteria.



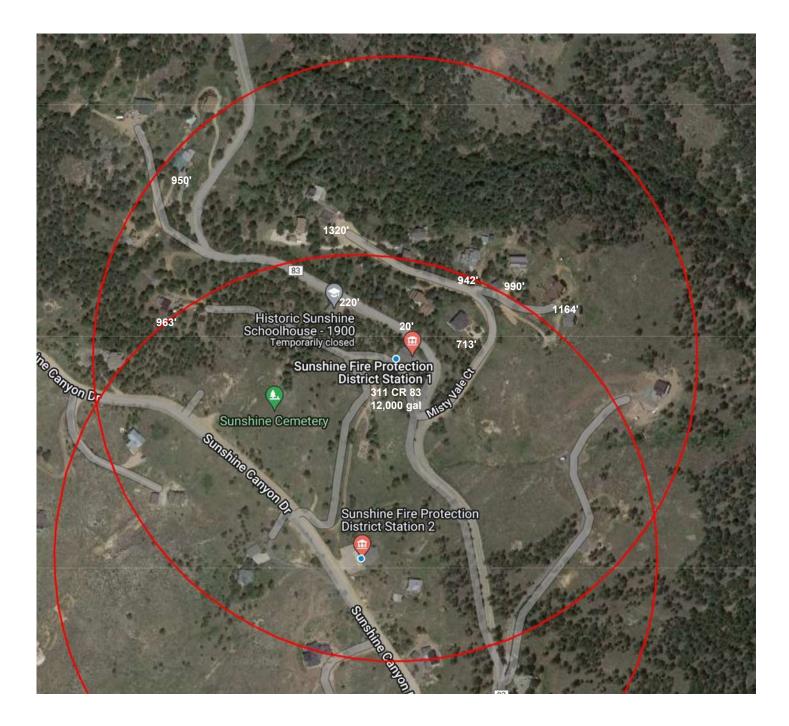
1462 County Rd 83 20,000 gallon Community Fire Cistern

Distances are given for houses that are within 1000' of the cistern as measured along roads/driveways. There are 9 houses that meet that criteria with 1 more house that is within 1053'



875 County Rd 83 10,000 gallon Community Fire Cistern

Distances are given for houses that are within 1000' of the cistern as measured along roads/driveways. There are 7 houses that meet that criteria.



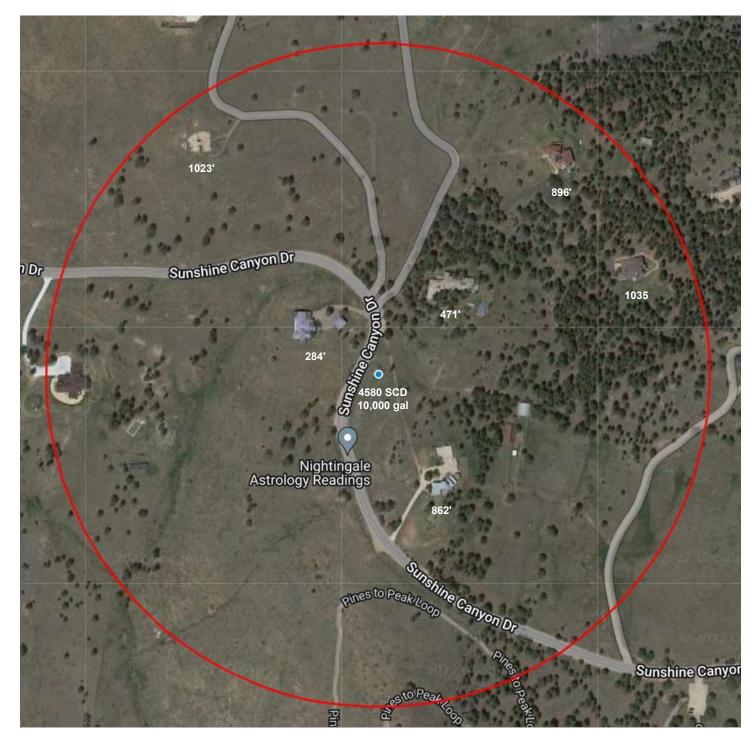
#### 311 County Rd 83 12,000 gallon Community Fire Cistern

Distances are given for houses that are within 1000' of the cistern as measured along roads/driveways. There are 7 houses that meet that criteria, including the schoolhouse.



5391 Sunshine Canyon Dr 10,000 gallon Community Fire Cistern

Distances are given for houses that are within 1000' of the cistern as measured along roads/driveways. There are 6 houses that meet that criteria.



4580 Sunshine Canyon Dr 10,000 gallon Community Fire Cistern

Distances are given for houses that are within 1000' of the cistern as measured along roads/driveways. There are 4 houses that meet that criteria with 2 additional houses that are less than 1050' away.



4336 Sunshine Canyon Dr 30,000 gallon Private Fire Cistern

Distances are given for houses that are within 1000' of the cistern as measured along roads/driveways. There are 2 houses that meet that criteria.



3355 Sunshine Canyon Dr 10,000 gallon Community Fire Cistern

Distances are given for houses that are within 1000' of the cistern as measured along roads/driveways. There are 3 houses that meet that criteria. A 4<sup>th</sup> house is 1073' away.

#### Sunshine Fire Protection District 2023 Budget

2023 Assessed valuation \$14,000,708	2021 Actual	2022 Act. Jan - Nov	2022 Budget	202 Budge
Revenue:				
4000 · Tax Income				
4025 · General Property Tax Income	\$107,582.88	\$122,782.69	\$120,029	\$118,72
4026 · Specific Ownership Tax	\$0.00	\$0.00	\$0	9
4027 · Interest Income - County Treas.	\$0.00	\$0.54	\$0	9
4030 Capital Improvements Income	-\$238.06			
4035 - CWPP Tax Income	\$45,064.57	\$51,545.51	\$50,389	\$49,84
Total 4000 · Tax Income	\$152,409.39	\$174,328.74	\$170,418	\$168,56
4001 · Contract Fire Protection Svc	\$208,940.35	\$368,731.90	\$140,000	\$5,00
4010 - Water Supply Improvement Donations	\$0.00	\$10,000.00	\$0	
4020 · Interest Income	\$1,430.67	\$1,245.05	\$750	\$5,00
4040 - Event Income	\$0.00	\$0.00	\$0	
4075 · Grants				
4078 · Grants SFPD	\$9,335.22	\$0.00	\$5,000	\$5,00
4077 · Grants CWPP	\$22,944.00	\$0.00	\$0	:
4090 · Contributions and Donations	\$26,049.88	\$20,364.27	\$15,000	\$15,0
4092 - CWPP Donations	\$0.00	\$0.00	\$0	:
4095 · Insurance Income	\$934.58	\$0.00	\$0	:
4100 - Proceeds from Capital Leases		\$0.00	\$0	:
4200 · Appropriation from Reserves				
4201 · Appropriation from Capital Reserve	\$53,609.65	\$277,822.00	\$277,822	:
4202 · Appropriation from CWPP Reserve	\$21,289.91	\$28,086.00	\$28,086	\$6,8
4203 · Appropriation from Cistern Fund	\$40,617.93	\$0.00	\$0	\$9,1
4500 - Gain/Loss on Sale of Equipment	\$0.00	\$7,500.00	\$0	
Total Revenue	\$537,561.58	\$888,077.96	\$637,076	\$214,6
Expenditures:				
6000 · General & Administrative				
6050 · Bank Charges	\$99.00	\$10.00	\$120	\$12
6100 · Dues and Subscriptions	\$1,648.01	\$3,185.98	\$1,500	\$2,5
6120 · Election Expense	\$0.00	\$0.00	\$0	
6110 · Externally Supported Events	\$0.00	\$0.00	\$0	
6350 · Grounds and Building Maint.	\$2,101.58	\$6,866.62	\$2,000	\$4,3
6410 · Insurance	\$33,507.00	\$2,440.00	\$20,000	\$20,0
6430 · Legal & Accounting	\$3,367.02	\$4,676.47	\$2,000	\$10,0
6500 · Office Supplies	\$274.28	\$235.08	\$200	\$3
6520 · Printing & Reproduction	\$1,121.80	\$105.74	\$350	\$3
6660 · County Treasurer Fee	\$0.00		\$0	
6700 · Utilities	\$6,377.49	\$6,127.28	\$6,500	\$8,2
Total 6000 · General & Administrative	\$48,496.18	\$23,647.17	\$32,670	\$45,74
6101 · Operating Expense				
6080 · Contract Services	\$159,225.38	\$194,848.39	\$130,000	\$3,00
6150 · Equipment - Non-Capital	\$9,760.66	\$8,738.68	\$22,000	\$10,00
6152 · Equipment - New Engine Non-Capital	\$0.00	\$9,415.55	\$0	
6155 · Fire Fighting Expense	\$5,872.93	\$6,099.03	\$4,000	\$4,5
6460 · Machine Hire	\$200.00	\$200.00	\$200	\$2
6465 · Fire Marshall Services	\$0.00	\$0.00	\$0	
6466 · Medical Director Services	\$0.00	\$0.00	\$0	\$1,0
6560 · Payroll Expenses	\$0.00	\$143,446.79	\$10,000	\$2,0
6600 · Repairs and Maintenance	\$29,012.26	\$6,710.83	\$15,000	\$12,0
6620 - Special Event Expense	\$0.00	\$2,184.55	\$1,500	\$4,5
6650 · Training and Education	\$5,483.78	\$2,088.71	\$6,500	\$6,0
6720 · Wildland Mitigation Expense	\$63,510.00	\$16,963.09	\$48,475	\$25,90

6200 · Capital Outlay				
6070 · Capital Lease Expense	\$0.00	\$0.00	\$34,716	\$0
6201 · Equipment	\$0.00	-\$1,245.25	\$10,000	\$10,000
6202 · Engine Purchase	\$121,373.00	\$381,032.70	\$279,015	\$0
6204 · Buildings	\$0.00	\$0.00	\$0	\$0
6206 · Equipment-PPE	\$10,149.84	\$0.00	\$10,000	\$10,000
6207 · Capital CSDP (Safety) Radios	\$18,071.34	\$0.00	\$3,000	\$1,800
6208 · Equipment New Engine	\$0.00	\$17,060.95	\$0	\$2,500
6400 · Interest Expense	\$0.00	\$0.00	\$0	\$0
6730 · Water Supply Improv. Expense	\$66,406.41	\$820.97	\$30,000	\$40,000
Total 6200 · Capital Outlay	\$216,000.59	\$397,669.37	\$366,731	\$64,300
Total Expenditures	\$537,561.78	\$812,012.16	\$637,076	\$179,140
Revenue Over (Under) Expenditures		\$76,065.80	\$0	\$35,486
Other Income and Expenses				
6701 · Other Income and Expenses				
6740 · Transfer to Capital Reserve	\$0.00	\$4,218.35	\$0	\$35,486
6741 Transfer to CWPP Reserve	\$0.00	\$62,668.42	\$0	\$0
6742 · Transfer to Cistern Fund	\$0.00	\$9,179.03	\$0	\$0
Total 6701 · Other Income and Expenses	\$0.00	\$76,065.80	\$0	\$35,486

#### RESOLUTION TO ADOPT 2023 BUDGET FOR THE SUNSHINE FIRE PROTECTION DISTRICT A RESOLUTION SUMMARIZING REVENUES AND EXPENDITURES FOR EACH CATEGORY, AND ADOPTING A BUDGET FOR THE SUNSHINE FIRE PROTECTION DISTRICT FOR THE CALENDAR YEAR BEGINNING ON THE FIRST DAY OF JANUARY 2023, AND ENDING ON THE LAST DAY OF DECEMBER 2023

**WHEREAS**, the Board of Directors of the Sunshine Fire Protection District has appointed the Treasurer to prepare and submit a proposed budget to said governing body at the proper time; and,

WHEREAS, upon due and proper notice published in accordance with the law, said proposed budget was open for inspection by the public at a designated place, a public hearing was held on December 6, 2022, and interested taxpayers were given the opportunity to file or register any objections to said proposed budget; and,

WHEREAS, whatever increases may have been made in the expenditures, like increases were added to the revenues so that the budget remains in balance, as required by law.

# NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE SUNSHINE FIRE PROTECTION DISTRICT:

Section1. That estimated expenditures are as follows:

General & Administrative	\$45,740
Operating	\$69,100
Capital Outlay	<u>\$64,300</u>
Total Expenditures	\$179,140

Section 2. That estimated revenues are as follows:

From General Property Tax Levy	\$118,726
From Wildland Mitigation Tax Levy	\$49,843
From Fire Fighting Income	\$5,000
From Grants	\$5,000
From Donations	\$15,000
From Appropriation from Capital Reserves	\$0
From Appropriation from CWPP Reserves	\$6,878
From Appropriation from Cistern Fund	\$9,179
Interest Income	\$5,000
From Water Supply Improvements	<u>\$0</u>
Total Revenues	\$214,676

Section 3. That the budget as submitted, amended, as hereinabove summarized by Category, be and the same is hereby approved and adopted as the Budget of the Sunshine Fire Protection District for 2023.

Section 4. That the budget hereby approved and adopted by the Board of Directors, shall be made a part of the public records of said District.

ADOPTED this 6th day of December 2022.

Chair, Board of Directors

ATTEST:

Secretary, Board of Directors

#### A RESOLUTION LEVYING GENERAL PROPERTY TAXES FOR THE YEAR 2022, TO HELP DEFRAY THE COSTS OF GOVERNMENT FOR THE SUNSHINE FIRE PROTECTION DISTRICT, COLORADO, FOR THE 2023 BUDGET YEAR

**WHEREAS**, the Board of Directors of Sunshine Fire Protection District has adopted the annual budget in accordance with the local government budget law on December 6, 2022; and,

**WHEREAS**, the amount of money necessary to balance the budget for Operating Expenses is \$69,100 and General Administrative Expenses is \$45,740 consisting of \$118,726 from General Tax Revenue, \$49,843 from Wildland Mitigation Tax Revenue, \$5,000 from Fire Fighting Income, \$5,000 from Interest Income and \$15,000 from Donations, and

**WHEREAS**, the amount of money necessary to balance the budget for the Special Capital Improvements (Capital Outlay) is \$64,300 consisting of \$118,726 from General Tax Revenue, \$49,843 from Wildland Mitigation Tax Revenue, \$5,000 from Grants, \$15,000 from Donations, \$6,878 from CWPP Reserves and \$9,179 from the Cistern Fund;

**WHEREAS**, the 2022 valuation for assessment for the Sunshine Fire Protection District, as certified by the County Assessor is \$14,000,708,

## NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE SUNSHINE FIRE PROTECTION DISTRICT:

Section 1. That for the purpose of meeting all general operating expenses of the Sunshine Fire Protection District during the 2023 budget year, there is hereby levied a tax of 8.480 mills upon each dollar of the total valuation assessment of all taxable property within the District for the year 2022.

Section 2. That for the purpose of meeting the Wildland Mitigation expenses of the Sunshine Fire Protection District during the 2023 budget year, there is hereby levied a tax of 3.560 mills upon each dollar of the total valuation assessment of all taxable property within the District for the year 2022.

Section 3. That the Secretary is hereby authorized and directed to immediately certify to the County Commissioners of Boulder County, Colorado, the mill levies for the Sunshine Fire Protection District as hereinabove determined as set.

Adopted this 6th day of December 2022.

Chair, Board of Directors

ATTEST:

Secretary, Board of Directors