Harris & Associates

FIRE SUPPRESSION BENEFIT ASSESSMENT DISTRICT NO. 2022-1

ENGINEER'S REPORT

August 2022

Prepared under the provisions of Government Code Section 50078 et. seq.

Prepared for the

PEARDALE-CHICAGO PARK FIRE PROTECTION DISTRICT

Nevada County, California

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DRAFT ENGINEER'S REPORT
PEARDALE-CHICAGO PARK FIRE PROTECTION DISTRICT
FIRE SUPPRESSION BENEFIT ASSESSMENT DISTRICT NO. 2022-1

The undersigned respectfully submits the enclosed report as directed by the Board of Directors of the Peardale-Chicago Park Fire Protection District. The undersigned certifies that they are a Professional Engineer, registered in the State of California.

DATED: _____

_____
By: Alison Bouley
Assessment Engineer
R.C.E. No.C61383

I HEREBY CERTIFY that the enclosed Engineer's Report, together with Assessment Roll hereto attached was filed with me on the____day of_____, 2022.

Clerk of the Board, Peardale-Chicago Park
Fire Protection District
Nevada County, California

By:
_____

I HEREBY CERTIFY that the enclosed Engineer's Report, together with Assessment Roll thereto attached was approved and confirmed by the Board of Directors of the Peardale-Chicago Park Fire Protection District, Nevada County, California, on the____day of _____, 2022.

Clerk of the Board, Peardale-Chicago Park
Fire Protection District
Nevada County, California

By:
_____

1 OVERVIEW

1.1 INTRODUCTION

The Peardale-Chicago Park Fire Protection District ("Fire District") provides basic fire suppression service and first responder services to residents and properties within the Fire District's service area. This basic level of service, whether actually used or not, is available at the same level to all properties in the Fire District's service area.

As a result of limited available funds, increased demand for fire suppression services, increasing costs to provide fire protection services, the need to replace retiring personnel, and the Fire District's desire to increase the level of service provided, the Fire District intends to initiate proceedings for the adoption of a Fire Suppression Assessment ("Assessment") pursuant to the provisions of Government Code 50078 et. seq. ("Code") and California Constitution Article XIIID ("Proposition 218"). The Code provides for the levy and collection of assessments by the Fire District to generate revenue to pay for fire suppression services and equipment, which provides a special benefit to the parcels within the Fire District.

The Assessment will provide a portion of the funds needed to maintain and enhance fire protection service capacity by providing a revenue stream dedicated to fire suppression services, salaries and benefits of firefighting personnel, and fire suppression equipment and apparatus.

This Report is to be filed with the Clerk of the Board of the Peardale-Chicago Park Fire Protection District and contains the following elements, in compliance with the Code:

- A description of each lot or parcel of property proposed to be subject to the assessment;
- The amount of the assessment for each lot or parcel for the initial fiscal year;
- The maximum amount of the assessment which may be levied for each lot or parcel during any fiscal year;
- The duration of the assessment;
- The basis of the assessment; and
- The schedule of the assessment.

1.2 FIRE DISTRICT BACKGROUND

The Fire District was formed in 1954 in order to provide fire protection for structures and wildland, emergency medical response and public assistance to the communities of Peardale, Chicago Park, You Bet/Red Dog and the outlying areas of western Nevada County ("County"). The Fire District covers nearly 17 square miles and serves a population of approximately 3,000. Emergency medical services are also provided for the three public campgrounds on Rollins Lake; Orchard Springs, Greenhorn, and Peninsula, whose summertime guests can swell the district population to over 5,000.

The Fire District operates two fire stations. Station 57, located at 18934 Colfax Highway in Chicago Park, and Station 257, located at 15057 Colfax Highway in Peardale. The main station (Station 57) is staffed with a Fire Chief and driver/operator, nine (9) hours per day, seven (7) days a week (both are paid positions). All other staff and operations occur by paid-call firefighters. Neither station is staffed during the evening hours unless a firefighter volunteers to spend the night. Staff also includes a part-time secretary and one (1) Chief. The vehicle fleet includes two fire engines, one wild-land (brush) engine, one water tender, two utility vehicles and one patrol vehicle.

In addition to structure fires, wildland fires and medical aid, the Fire District trains for and responds to a variety of other emergencies, such as traffic accidents, hazardous materials incidents, weather incidents, and water incidents.

The Fire District is also an active participant in the Nevada County Strike Team Response to major wildland fires that occur in California each year. The strike team includes the Fire District's wildland engine, which joins up with four other engines from other Nevada County fire departments and a chief officer who acts as a strike team leader. Once the engines are gathered they proceed to the fire incident and function as a team for the duration of the assignment.

1.3 HISTORICAL REVENUE SOURCES

The Fire District currently receives funding from multiple sources, including property taxes, intergovernmental transfers, interest earnings and other sources. Property taxes generated approximately $245,000 last year for the Fire District receives. This amount has been increasing at about 4-5% each year, due to new development and increasing property values.

In addition, District voters approved a special tax for fire protection in 1998 for fire prevention and suppression services, which generates approximately $105,000 annually. The special tax is levied on property within the Fire District at a rate of $58 per parcel for developed or improved property and a rate of $25 per parcel for unimproved property.

The rates cannot be increased without voter approval since the special tax did not include a built-in adjustment for inflation when it was approved in 1998. The Fire District may continue levying the special tax at existing rates.

Intergovernmental transfers and interest earnings generate approximately $25,000 annually and other revenue sources generates $200,000 to $400,000 annually, with most of that coming from reimbursements related to the strike team. However, most of the revenue is offset by an increase in personnel cost related to providing District personnel for the Strike Team.

Table 1 shows the Fire District budgeted revenues for the last five years:

Table 1

PEARDALE-CHICAGO PARK FIRE DISTRICT

Final Budgeted Revenue by Fiscal Year		2017-18	2018-19	2019-20	2020-21	2021-22
Tax Revenue						
400110	Current Secured Tax	192,000.00	198,000.00	210,000.00	223,000.00	235,000.00
400300	Current Unsecured Tax	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
400400	Prior Unsecured Tax	0.00	0.00	0.00	0.00	0.00
401700	Supplemental Secured Tax	2,000.00	3,200.00	3,200.00	3,200.00	3,200.00
401800	Supplemental Unsecured Tax	150.00	150.00	150.00	150.00	150.00
402800	Supplemental Prior Unsecured Tax	0.00	0.00	0.00	0.00	0.00
		198,150.00	**205,350.00**	**217,350.00**	**230,350.00**	**242,350.00**
Revenue from use of Money						
430100	Interest	2,000.00	3,500.00	4,000.00	7,000.00	6,000.00
		2,000.00	**3,500.00**	**4,000.00**	**7,000.00**	**6,000.00**
Revenue Intergovernmental						
442190	St - Homeowners Prop	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
442960	St - Prop 172 Pub Safety	20,000.00	20,000.00	20,000.00	15,000.00	20,000.00
443490	St - Timber Yield	0.00	0.00	0.00		0.00
		22,000.00	**22,000.00**	**22,000.00**	**17,000.00**	**22,000.00**
Revenue from Charges						
451170	Special Assessments	105,000.00	105,000.00	105,000.00	105,000.00	105,000.00
		105,000.00	**105,000.00**	**105,000.00**	**105,000.00**	**105,000.00**
Revenue from Other sources						
470600	Sale Fixed Assets					
462000	Other Revenues					
	Strike Team Reimb	130,000.00	250,000.00	150,000.00	300,000.00	350,000.00
	Transfers-Grants & Other	6,000.00		12,500.00	37,920.00	44,607.00
		136,000.00	**250,000.00**	**162,500.00**	**337,920.00**	**394,607.00**
TOTAL REVENUE		**463,150.00**	**585,850.00**	**510,850.00**	**697,270.00**	**769,957.00**

1.4 SERVICE LEVELS

The Fire District continues to see an increase in the number of calls it receives. In response to the continued increase in the number of calls, the Fire District continually evaluates its ability to respond to emergency events adequately. The Fire District has averaged 360 calls for service annually however, over the past three years that average has increased to over 400 calls according to an Incident Report provided by the Fire District on 1/12/22. With the increase in the number of calls the Fire District receives, response times will increase and there will be inadequate personnel available to provide a full fire suppression response.

The District currently staffs Station 57 with two (2) firefighters on duty for 9 hours per day, seven days per week. This allows the District to provide an initial fire suppression response until additional paid call personnel arrive on scene or an engine from another agency arrives under the District's mutual aid agreement. A minimum of four (4) personnel are required on scene to allow entry for search and rescue, ventilation of the structure to support fire suppression activities and to support other activities beyond the initial fire suppression. For calls received outside the hours Station 57 is staffed, the District must wait until the paid call staff arrive, which significantly increases response times. Increased response times could delay vital assistance to residents and property owners in the District.

To improve response times and to meet future needs, the District's goal is to add two (2) additional full-time engineer positions, 2 year round seasonal firefighter positions (2 summer and 2 fall), increase the Chief's salary to ensure a future candidate can be attracted, increase the Fire Captain's salary, fund $50,000 per year for capital improvements, and fund an additional $26,000 for back-fill and overtime. Necessary capital improvements include upgrades to the fire stations and purchase of fire-fighting apparatus. The proposed additions as described above will require an additional $379,194 per year. This total was derived as follows:

- 4 seasonal firefighters at $18,125 each ($72,500)
- 2 Engineer positions at $89,000 each ($178,000)
- Increase to Chief's salary from $105,925 to $140,000 ($34,075)
- Increase to Captain's salary from $86,506 to $105,125 ($18,619)
- Capital improvements and back-fill ($76,000)

The District's current revenues are insufficient to support the additional staffing levels and other increases in operational costs. Existing revenue totaled $769,957 in Fiscal Year 2021-22. Total expenditures for Fiscal Year 2021-22 were budgeted at $769,957 including expenditures for salaries and insurance, operating expenses, administrative expenses, and maintenance.

In order to fund the addition of new personnel and other items mentioned above, the Fire District is proposing to adopt a fire suppression benefit assessment ("Assessment"), in addition to the existing special tax. If approved, the Assessment would fund the additional costs, allowing the District to increase the hours Station 57 is staffed, and would reduce response times for calls received during the additional hours the station would be staffed.

The assessments and method of apportionment described in this Engineer's Report ("Report") for the proposed Fire Suppression Assessment utilize accepted assessment engineering practices and have been calculated and proportionately spread to each parcel based on the special benefits received by each class or type of property.

1.5 DISTRICT REVENUES AND EXPENSES

The proposed Fire Suppression Assessment would add two (2) additional full-time engineer positions, 2 year round seasonal positions, increase the Chief's salary, increase the Fire Captain's salary, and include amounts for capital improvements, and provide back-fill and overtime pay. This would increase the District's operating budget by approximately $399,000 annually. Table 2 shows the proposed revenues and expenditures for Fiscal Year 2022-23, and the estimated funding shortfall resulting from the proposed additional staffing.

Table 2
Proposed Revenues and Expenditures by Source (Fiscal Year 2022-23)

Revenues	
Property Taxes*	$ 252,044
Current Special Taxes	$ 105,000
Strike Team	$ 350,000
Transfers-In	$ 44,607
Intergovernmental	$ 22,000
Interest	$ 6,000
Total Revenues	**$ 779,651**
Expenditures	
Salaries and Benefits	$ 880,354
Services and Supplies	$ 107,415
Fixed Assets	$ 93,000
Capital Outlay	$ 20,000
Contingencies	$ 78,092
Total Expenditures	**$ 1,178,861**
Funding Shortfall	
Proposed Fire Suppresion Assessment	**$ 399,210**

*Property tax revenue is expected to increase by 4% over 2021-22, with an additional increase in Salaries and Benefits.

2 GENERAL VS SPECIAL BENEFIT

Article IIIX D of the California Constitution requires any local agency proposing to implement a benefit assessment, to "separate the general benefits from the special benefits conferred on a parcel." The rationale for separating special from general benefits is to ensure that property owners subject to the benefit assessment are not paying for general benefits, which are benefits available to the public at large. An assessment can fund special benefits but cannot fund general benefits. Accordingly, a separate estimate of the special and general benefit is described herein.

There is no widely-accepted or statutory formula for determining general benefit. General benefits are described as "not particular and distinct" and are "not over and above" benefits received by the public at large or other properties not subject to an assessment.

2.1 GENERAL BENEFIT

The services provided by the District were described in Section 1 of this Report, and those services provide a direct benefit to the parcels in the District. With the adoption of the proposed Assessment, the fire protection and suppression services within the District will be enhanced significantly and such services will be over and above what otherwise would be provided.

The expenses to be financed from the proposed Assessment are based on the needs of the District. The District is responsible for obtaining, furnishing, operating and maintaining fire suppression equipment and/or apparatus, and for the purpose of paying the salaries and benefits of the fire fighting personnel who provide fire suppression services to the parcels within the District, whether or not fire suppression services are actually used by a parcel or property. Other services include, but are not limited to, fire prevention, inspection and education, training, hazardous material response, etc.

The proposed Assessment will also contribute to cover the general costs of administering the District, its facilities and operations, as well as the salaries and benefits of any administrative personnel.

Since assessments can only be levied on the basis of special benefit, the first requirement in the development of the Fire Suppression Benefit Assessment is to separate general from special benefit. In determining the Fire Suppression Benefit, general benefit would include the costs associated with responding to medical emergencies, traffic accidents and other services provided by the Fire District that reduce the District's ability to respond a fire, and that are not directly related to fire suppression activities for properties within the District.

In order to identify the costs associated with providing services that may be considered general benefit, an analysis was made of the number the total labor hours for fire suppression personnel spent on non-fire suppression activities (responding to medical emergencies, vehicle accidents and other non-fire related services).

Based upon staffing Station 57 for nine (9) hours per day there were a total of 6,570 hours per year where personnel were available to respond to and provide fire suppression services to the community. This is a conservative estimate of the available personnel hours since it does not include hours for paid call fire fighters.

Based on an Activity/Incident Report provided by the District, from 2019-20 to 2021-22, the Fire District dedicated 3,106 personnel hours to non-fire suppression activities. The table below summarizes information on the personnel hours related to fire suppression activities for the previous three years.

Table 3

Year	Total Available Hours	Non-Fire Response Hours	% Hours Avail. For Fire Suppression
2019	6,570	1,096.5	83.31%
2020	6,570	928.0	85.88%
2021	6,570	1,082.0	83.53%
Totals:	**19,710**	**3,106.5**	**84.24%**

Total available hours based on two people at nine hours per day, multiplied by 365 days per year.

The hours and costs associated with "Non-Fire Response Hours" are deemed to be related to General Benefit and may not be paid for from the Fire Suppression Benefit assessment revenue. As shown in Tables 3 and 4, 15.76% of the total available personnel hours were devoted to non-fire suppression activities. For purpose of estimating General Benefit, the engineer has determined that 15.76% of the District's expenditures are related to General Benefit and therefore may not be paid using fire suppression assessment revenues.

Although call volume will increase as a result of new development, additional property tax revenue and additional assessments from those newly developed properties paying an assessment, should off-set the additional expenses.

In addition, the service area of the District is also located within a State Responsibility Area, and pursuant to Government Code section 50078.2(b), a benefit assessment shall not be levied for wildland or watershed fire suppression services on property located in a State Responsibility Area. Therefore, vacant parcels will not be assessed. Although a fire suppression assessment may not be imposed on these parcels, the District still responds to calls on these parcels therefore, the analysis allocates a proportional share of the District's budget based on the estimated benefit these parcels receive. This amount is considered General Benefit and cannot be funded through the assessment.

Based on discussions with the District, less than 5% of the fire incident calls are to a fire originating on vacant parcels. Therefore we conservatively estimated that 10% of the expenses related to fire suppression activities within the district are considered General Benefit This would account for "spill-over" fires originating on developed properties and spreading or jumping to undeveloped properties. This includes calls to both vacant parcels and parcels that are designated exempt.

2.2 SPECIAL BENEFIT

Special benefit is defined by Article IIIX D of the California Constitution as a "particular and distinct benefit, over and above general benefits." The fire suppression services to be funded by the proposed assessment provide a "particular and distinct" benefit because the enhanced service level will be "over and above" what the District is currently able to provide to the properties within the District. The additional personnel funded by the proposed new assessment will enhance the District's ability to reduce response times and increase the fire suppression resources available to property owners within the District.

Properties within the District receive almost all of the special benefits from the fire suppression services because the services are provided solely within the boundaries of the District. It should be noted however, that fire suppression services may, at times, be used outside the District boundaries. This service is part of a mutual aid agreement with other fire agencies in the area and is offset by similar services being provided to PCPFPD by those other fire agencies.

In order to allocate the assessments, the Engineer identified the types of benefit arising from the proposed assessment and the enhanced services that will be provided to the District parcels.

The following benefit categories have been established, representing the types of special benefit conferred to the District parcels, resulting from the enhanced level of services to be funded by the assessment.

- Increased Safety and Protection of property and individuals
- Enhanced Fire Suppression capabilities resulting in a reduction of property damage and economic loss

The proposed assessments will fund enhanced levels of fire suppression, fire prevention and protection services, thereby significantly reducing the risk of property damage, human injury, or death associated with fires within the District. Fire mitigation specifically benefits the properties within the District. According to the National Fire Protection Association (NFPA) website:

Local fire departments responded to 1,338,500 fires in 2020. These fires caused 3,500 civilian deaths, 15,200 civilian injuries and $21.9 billion in property damage.

Every 23 seconds, a fire department in the United States responds to a fire somewhere in the nation. A fire occurs in a structure at the rate of one every 64 seconds, and a home fire occurs every 89 seconds.

Seventy-four percent of all fire deaths were caused by home fires. This includes the 64 percent that resulted from fires in one- or two-family homes and the 10 percent caused by fires in apartments or other multi-family housing.

2.3 EXPENSE DISTRIBUTION

The Fire District's estimated expense budget for FY 2022-23 is shown in Table 4, which includes the costs for the additional personnel the District would hire with the Fire Suppression Assessment revenues. In general, costs have been allocated between fire suppression and non-fire suppression, using the percentage distribution of labor hours shown in Table 3. Based upon the consultant's experience, this is a reasonable allocation of costs since most costs are proportional to the number of personnel including employee expenses, such as employee health insurance and workers' compensation insurance.

Table 4
Proposed Expenditures for Fiscal Year 2022-23

Description	Total 100.00%	Non-Fire Suppr. Hours (General Benefit) 15.76%	Hours Avail. Fire Suppr. (Special Benefit) 84.24%
Salaries & Benefits			
Salary	$ 430,192	$ 67,798	$ 362,394
Health (Pretax)	$ 47,290	$ 7,453	$ 39,836
D&V (Tax)	$ 4,299	$ 678	$ 3,621
Medicare&UI&ETT	$ 13,080	$ 2,061	$ 11,019
Social Security	$ 22,756	$ 3,586	$ 19,170
Unplanned Overtime (Salaries & Benefits)	$ 223,910	$ 35,288	$ 188,622
Retirement Benefits	$ 80,608	$ 12,704	$ 67,904
Vacation/Sick Payout	$ 4,478	$ 706	$ 3,772
Comp Insurance	$ 53,739	$ 8,469	$ 45,270
Total Salaries & Benefits	**$ 880,354**	$ 138,744	$ 741,609
Services and Supplies	**$ 107,415**	$ 16,929	$ 90,486
Fixed Assets	**$ 93,000**	$ 14,657	$ 78,343
Capital Outlay	**$ 20,000**	$ 3,152	$ 16,848
Contingencies	**$ 78,092**	$ 12,307	$ 65,785
Total Expenditures	**$ 1,178,861**	**$ 185,788**	**$ 993,073**
% of Total	**100.00%**	**15.76%**	**84.24%**

As shown in Table 4, $993,073 of the annual costs were identified as related to the Fire District's ability to respond to calls for fire suppression services. The $185,788 related to non-fire suppression calls represents general benefit that cannot be funded through the assessments. In addition, as shown in Table 1, there are expenses related to the strike team that are for services that do not benefit the properties within the District.

The estimated $350,000 in strike team costs is therefore removed from the special benefit calculation. Based on the percentage of fires over the last three years that are for a response to vacant/unimproved parcels, $64,307 is related to Unimproved Parcels that cannot be assessed and is therefore removed from special benefit, and must be funded by other revenue sources of the District. The District already collects $105,000 in special taxes and this amount is also removed from the maximum assessment amount.

Table 5 shows these amounts and the resulting maximum assessment amount ($473,766). The District shortfall shown in Table 2 ($399,210) is less than this maximum assessment amount and will be used to determine the Fire Suppression Assessment amount.

Table 5
Special Benefit
Fiscal Year 2022-23

Costs Related to Fire Suppression Services	$ 993,073
Strike Team Expenses	($350,000)
Subtotal	**$643,073**
Special Taxes	($105,000)
Unimproved/Vacant Parcels*	($64,307)
Maximum Special Assessment	**$473,766**

* Based on an estimated 10% of fire calls being to vacant parcels.

Harris & Associates believes that this allocation of costs represents a conservative basis for the identification of those fire suppression activities or costs that may be considered as providing a special benefit to property within the Fire Suppression Assessment District.

Since the primary goal of the Fire District is to respond and suppress fires, the total resources that would be needed to provide a similar level of fire response and suppression services would be almost identical based upon the requirements of NFPA 1720 (National Fire Protection Agency - Standard for the Organization and Deployment of Fire Suppression Organizations Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments), even if the Fire District did not provide emergency medical response or other services that are not property related.

This is a result of the requirement that to effectively begin fire suppression activities, the Fire District must:

- Get a minimum number of personnel and fire suppression equipment on scene to establish an uninterrupted water supply to support fire suppression efforts, as well as teams for victim search and rescue, ventilation of the structure and support personnel to operate safely and effectively.
- Have the capability for sustained operations, including fire suppression, engagement in search and rescue, forcible entry, ventilation, and preservation of property accountability for personnel; and, provision of support activities for those situations that are beyond the initial response.

3 METHOD OF APPORTIONMENT

3.1 GOVERNMENT CODE

Section 50078 of the Government Code permits the establishment of fire suppression assessments by agencies for the purpose of:

> *"obtaining, furnishing, operating, and maintaining fire suppression equipment or apparatus or for the purpose of paying the salaries and benefits of firefighting personnel, or both, whether or not fire suppression services are actually used by or upon a parcel, improvement, or property."*

The Act further requires that the assessment be levied according to benefit rather than assessed value, and that the agency:

> *"… shall establish uniform schedules and rates based upon the type of use of property and the risk classification of the structures or other improvements on, or the use of, the property. The risk classification may include, but need not be limited to, the amount of water required for fire suppression on that property, the structure size, type of construction, structure use, and other factors relating to potential fire and panic hazards and the costs of providing the fire suppression by the district to that property. The assessment shall be related to the benefits to the property assessed."*

The formula used for calculating assessments on parcels within the Fire District's service area therefore reflects the composition of the parcels, and the improvements and services provided, to fairly apportion the costs based on estimated benefit to each parcel. In addition, pursuant to Article XIIID Section 4 of the California Constitution:

> *"No assessment shall be imposed on any parcel which exceeds the reasonable cost of the proportional special benefit conferred on that parcel. Only special benefits are assessable, and an agency shall separate the general benefits from the special benefits conferred on a parcel."*

Parcel Classification
All parcels are assigned a classification based upon use code assigned by the Nevada County Assessor's Office. These land use classifications are defined as follows:

Single-Family/Manufactured/Mobile Homes – The single-family residential parcels represents approximately 80% of the total parcels within the Fire District's service area and it is used as the basic unit of scale.

Single-family residential parcels are defined as parcels that have a land use classification as single-family residential or as a mobile home on a residential lot with the Nevada County Assessor's Office. Mobile home parcels are defined as parcels that have a land use classification as mobile home or manufactured home.

Multi-Family – Multi-family parcels are defined as parcels that have a land use classification as multi-family, which includes duplexes, triplexes, apartments, etc. Condominium parcels are defined as parcels that have a land use classification as condominium, attached planned unit development or co-op. There are no condominium parcels with the boundaries of the District.

Non-Residential – Includes improved parcels that have a land use classification as commercial industrial, recreational or institutional. Non-residential also includes mixed-use commercial /residential parcels and agricultural parcels with buildings on the parcel.

Unimproved/Vacant/Government – Unimproved parcels are defined as parcels that have no improvements constructed thereon and have a land use classification as vacant or unimproved. These may include residential or non-residential parcels. All government parcels within the District are also vacant.

The District's service area is located within a State Responsibility Area (SRA) and pursuant to Government Code section 50078.2(b), a benefit assessment shall not be levied for wildland fire suppression services on property located within an SRA. Unimproved/vacant parcels are considered wildland and will not be assessed, since fire suppression services for these parcels are primarily the responsibility of the State of California. Although a fire suppression assessment will not be imposed on unimproved/vacant parcels, the District will still respond to calls to those parcels. This Report identifies unimproved/vacant parcels and allocates a proportional share of the District's budget based on the benefit received by those parcels. The amount allocated to unimproved/vacant parcels is considered general benefit and will not be funded through the proposed assessment. The fire suppression assessment only funds those services considered to be a special benefit to the improved parcels within the District's service area.

Exempt – Public or private roadways or streets and utility parcels are excluded from assessment. Also excluded are common areas, landscape strips, right of ways and sliver parcels (non-buildable due to size and any assessment would likely be lower than cost to place onto tax roll).

Table 6
Parcel Summary by Land Use

Land Use	Number of Parcels
Residential	
Single-Family/Manufactured/Mobile Home	1,673
Multi-Family	1
Non-Residential	
Commercial/Office/Retail	8
Motel	1
Unimproved/Vacant/Exempt	357
Total Parcels	2,040

3.2 ASSESSMENT RATE CALCULATION

Since assessments must be apportioned to parcels based upon the benefit they receive, the following sections describe the methodology used to assign Benefit Units (BU's) to each parcel within the District based upon its land use and types of structures on the parcel, and risk of fire.

Benefit Analysis

Since assessments must be allocated to each parcel based in proportion to the special benefits it receives from the availability of the enhanced fire suppression services, a method of apportionment (method of assessment) has been established based on the following:

- Each parcel within the Fire District's service area receives a special benefit based upon the enhanced fire suppression response capabilities; and,
- The special benefit to a parcel associated with the enhanced fire suppression capabilities is proportional to the risk of fire and the economic loss which would result in the event of a fire.

Each of the parcels within the Fire District's service area has been reviewed and the corresponding assessments have been proportionally spread to each parcel based on the special benefits received from the availability of fire suppression services to that parcel.

The method of assessment is based on the premise that each assessed parcel within the Fire District's service area receives special benefits from the availability of fire suppression services.

Risk Factor

Parcels within the district each receive a special benefit based on enhanced fire suppression response capabilities that will result from the addition of additional personnel and equipment. Based on discussions with the Fire District regarding incident reports, and due to the fact that the non-residential parcels in the District do not differ significantly in their fire risk than residential properties, it has been determined that all developed parcels within the District receive equal benefit from the Fire Protection services. Therefore, each developed property, and corresponding units, is assigned a fire risk factor of 1.0.

Table 7
Risk Factor

Occupancy Type	Risk Factor
Single-Family/Manufactured/Mobile Homes	1.00
Multi-Family	1.00
Non-residential	1.00

Property Loss Factor

The special benefit to properties associated with the enhanced fire suppression capabilities is proportional to the risk of fire and the economic loss which would result in the event of a fire. National property loss statistics were taken from the report published by the National Fire Protection Association, *Fire Loss in the United States During 2020* by Marty Ahrens and Ben Evarts. The report presents national estimates of property loss by property type due to structure fires. Property loss data is used to represent the estimated economic loss of a fire for each land use. The factor is calculated by dividing the property loss per incident for each land use type by the property loss per incident of a single-family home.

Based on the above, a Property Loss Factor has been assigned to each land use category as shown in Table 8.

Table 8
Property Loss Factor

	Property Loss (in Millions)	Number of Fire Incidents	Property Loss Per Incident	Property Loss Factor
Single-Family/Manufactured/Mobile Homes	6,771	270,500	25,031.42	1.00 per unit
Multi-Family	1,629	86,000	18,941.86	0.76 per unit
Non-residential	3,404	111,000	30,666.67	1.23 per parcel

Source: National Fire Protection Association, *Fire Loss in the United States During 2020,* Marty Ahrens and Ben Evarts.

Calculation of Benefit Units

The third step in apportioning the fire suppression benefit assessment to parcels is to calculate the total Benefit Units (BU). To calculate the Benefit Units, the Risk Factor is multiplied by the Property Loss Factor. This is then multiplied by the number of units to determine the total Benefit Units per parcel.

Benefit Units (BU's) = Risk Factor X Property Loss Factor X Number of Units

The total benefit units by Parcel type are then used to allocate the annual revenue requirement to each land use type as shown in Table 9.

Table 9
Allocation of Benefit by Land Use

Land Use	Risk Factor	X	Property Loss Factor	X	Units	=	Total Benefit Units by Parcel Type	% of Total Assessment Units	Allocation of Benefit by Land Use
Residential									
Single-Family/Manufactured/Mobile Homes	1.00		1.00		1,673		1,673.00	99.08%	$ 395,530
Multi-Family*	1.00		0.76		6		4.54	0.27%	$ 1,073
Non-Residential									
Com./Motel/Office/Retail	1.00		1.23		9		11.03	0.65%	$ 2,607
Totals							1,688.57	100.00%	$ 399,210

*This parcel has 6 dwelling units, per County data.

3.3 MAXIMUM ASSESSMENT AND DURATION

The maximum assessment for parcels within the Fire District's service area that benefit from enhanced fire suppression services are shown in the tables below. The annual levy for each parcel will be based upon the land use shown on the County Assessor's roll or the actual land use as determined by the District Fire Chief based upon a field review of the parcel. If there are multiple land uses on the parcel, the assessment shall be calculated using the highest loss factor on the parcel.

Assessments

The proposed total special assessment revenue required to fund additional firefighters and other associated costs amount to $399,194. The allocation of benefit by land use from Table 9 is divided by the number of units of each land use type to determine the assessment per unit for residential parcels or per parcel for non-residential parcels as shown in Table 10.

Table 10
Assessments

Land Use	Allocation of Benefit by Land Use	Number of Units/Parcels	Assessment per Unit/Parcel
Residential		*Units*	*Unit*
Single-Family/Manufactured/Mobile Homes	$ 395,530	1,673	$ 236.42
Multi-Family/Condominium	$ 1,073	6	$ 178.90
Non-Residential		*Parcels*	*Parcel*
Commercial/Office/Retail	$ 2,607	9	$ 289.64
Total	**$ 399,210**		

Assessment per Unit/Parcel shown above will vary slightly due to rounding. Nevada County requires assessments to be evenly divisible by two.

If approved, the Fire Suppression Assessment will be levied in perpetuity, unless the Board elects to discontinue the Fire Suppression Assessment, with the first assessment to be levied in Fiscal Year 2023-24.

3.4 COMPLIANCE WITH THE CALIFORNIA CONSTITUTION

In addition to providing fire suppression services, the Fire District also responds to non-fire suppression events, such as medical emergencies, which may include responding to motor vehicle accidents, and other events requiring rescue.

Pursuant to the requirements of Government Code Section 50078 et. seq. Article 3.6, "Fire Suppression Assessments" (the "Act"), the Fire District's Board will consider the proposed fire suppression benefit assessment upon parcels within the Fire District's service area that receive a special benefit from the enhanced fire suppression services. This will include using the assessment revenues to pay the salaries of the proposed additional paid firefighter, engineer and on the Fire Chief position.

As required by the Act, this Engineer's Report includes the following:

- A description of each lot or parcel of property proposed to be subject to the assessment;
- The amount of the assessment for each lot or parcel for the initial fiscal year;
- The maximum amount of the assessment which may be levied for each lot or parcel during any fiscal year;
- The duration of the assessment;
- The basis of the assessment;
- The schedule of the assessment; and
- A description specifying the requirements for protest and hearing procedures for the proposed assessment pursuant to Section 50078.6.

In addition, following the approval of this report by the Board, the Clerk of the Board shall mail an Assessment Ballot to the owner of each parcel of real property that would be subject to the assessment in accordance with the requirements of Proposition 218. The assessment cannot be imposed if a majority of the ballots returned by property owners are in opposition to the levy of the assessment versus the ballots returned by property owners in support of the assessment, weighted by assessment amount.

3.5 PROTEST AND HEARING

As required by Proposition 218, a Notice and Property Owner Ballot shall be mailed to each property owner whose parcel would be subject to the assessment, not less than 45 days prior to the Public Hearing to consider the adoption of the assessment. The assessment cannot be imposed if a majority of the ballots returned by property owners are in opposition to the levy of the assessment versus the ballots returned by property owners in support of the assessment, weighted by assessment amount.

3.6 ACCURACY OF DATA

The assessment roll attached is based upon the most current data shown on the County Assessor's records. Any property owner may file a written request with the Fire District's designee if they believe that information shown for their parcel is incorrect. The Fire District will review the data used to calculate the assessment, and if warranted, will update the data to reflect the current use for the parcel and the appropriate changes will be made to the assessment roll.

4 ASSESSMENT ROLL

The proposed assessment and the amount of the assessment apportioned to each lot or parcel, as shown on the latest roll at the Assessor's Office, is shown in Appendix B. The description of lot or parcel is part of the records of the Assessor of the County of Nevada and those records are, by reference, made part of this report. The assessments shown will be submitted to the County Auditor-Controller and included on the property tax roll for each parcel shown in the assessment roll for Fiscal Year 2023-24.

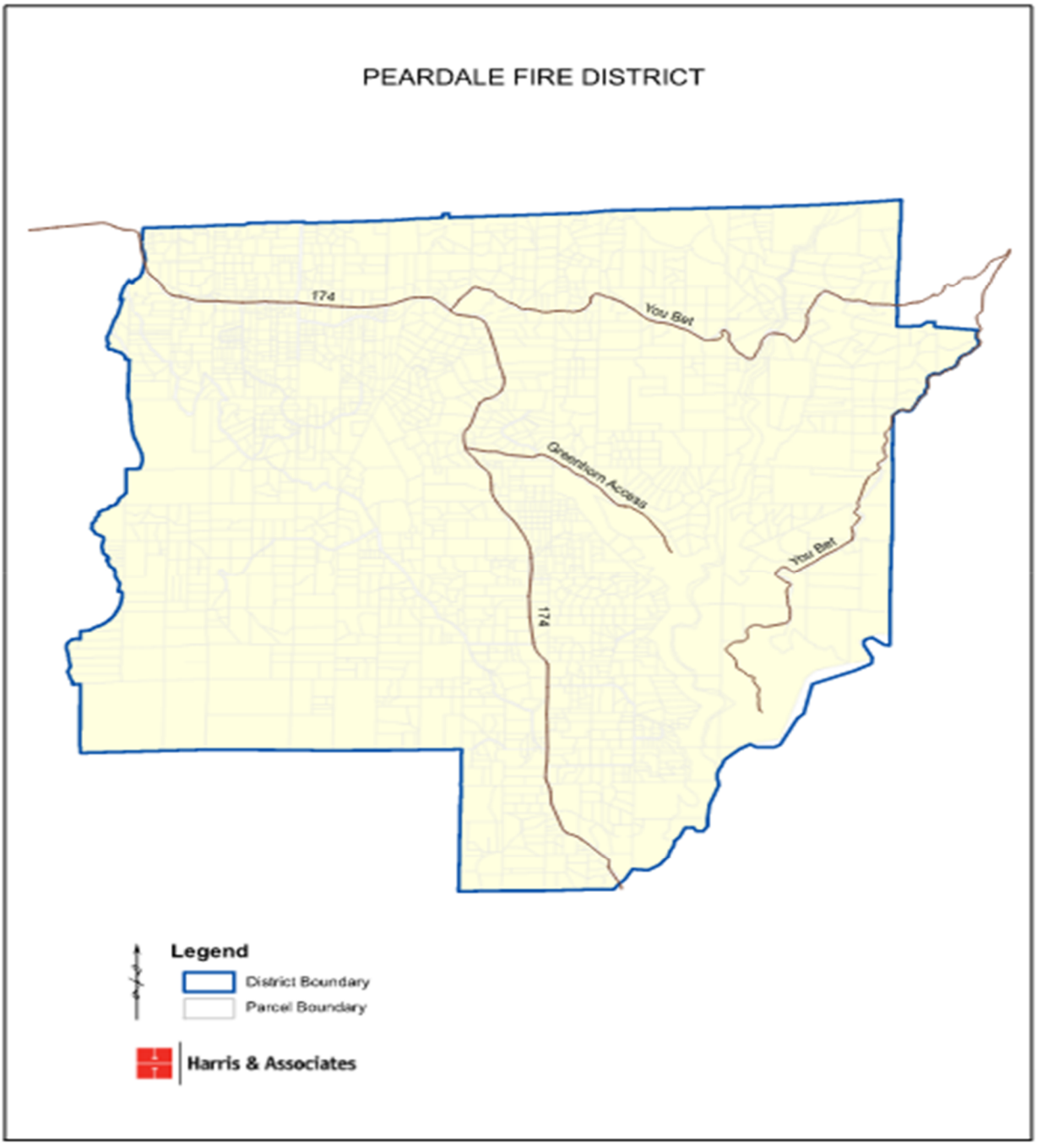
5 DISTRICT DIAGRAM

The assessment diagram for the proposed Assessment District is shown in Appendix B. Parcel identification, the lines and dimensions of each lot, parcel and subdivision of land within the Fire District, are inclusive of the parcels as shown on the County of Nevada's Assessor's Parcel Maps as they existed at the time of the passage of the Resolution of Intention, and shall include subsequent subdivisions, lot line adjustments or parcel changes therein. Reference is hereby made to the County of Nevada Assessor's maps for a detailed description of the line and dimensions of each lot and parcel within the County.

ASSESSMENT ROLL

A complete listing of the parcels to be assessed and the corresponding assessment is too large to include in this Report. An Assessment Roll in electronic media has been submitted to the District.

DISTRICT BOUNDARY MAP



ASSESSMENT ROLL

A complete listing of the parcels to be assessed and the corresponding assessment will be included with the final engineer's report.