

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

SAFETY AND ENFORCEMENT DIVISION

RESOLUTION SED-4

August 19, 2021

R E S O L U T I O N

Resolution SED-4. Corrects an error in the CPUC Fire-Threat Map and requires that download links on the Commission’s website be updated with links to the corrected map files.

PROPOSED OUTCOME:

This Resolution corrects an error in the current CPUC Fire-Threat Map and requires that the Commission’s Safety and Enforcement Division update the map download links on the Commission’s website with links to the corrected map files.

SAFETY CONSIDERATIONS:

This Resolution adds an approximately 1,960-acre area, including Fitch Mountain and surrounding sections of the City of Healdsburg, to Tier 2 of the CPUC Fire-Threat Map. In this area, all regulations and necessary inspection, maintenance, and system hardening programs applicable in Tier 2 will now apply, thus increasing safety for the residents of the City of Healdsburg and surrounding areas.

ESTIMATED COST: Costs of compliance with the correction are unknown.

SUMMARY

In comments submitted during development of the CPUC Fire-Threat Map, the City of Healdsburg (“City”) proposed that an additional area in the City be included in Tier 2 of the CPUC Fire-Threat Map. The Peer Development Panel (“PDP”) and the Independent Review Team (“IRT”), which had primary responsibility for development of the CPUC Fire-Threat Map, reviewed the City’s proposal and determined that most, but not all, of

the proposed addition met the criteria for Tier 2 and thus should be added to Tier 2. However, the resulting revisions that the IRT approved were inadvertently omitted when the CPUC Fire-Threat Map was finalized.

This Resolution corrects that error by adopting a corrected CPUC Fire-Threat Map and requiring that the Commission's Safety and Enforcement Division ("SED") update the map download links on the Commission's website with links to the corrected map files.

BACKGROUND

In 2012, the Commission ordered the development of a statewide map that identifies areas where there is an increased risk for utility associated wildfires. Development of the resulting CPUC Fire-Threat Map started in Rulemaking ("R.") 08-11-005 and continued in R.15-05-006.

The CPUC Fire-Threat Map delineates, in part, the boundaries of a High Fire Threat District, within which utility infrastructure and operations are subject to stricter fire-safety regulations. The CPUC Fire-Threat Map reflects the fire hazards associated with October 2007 fires in Southern California, the September 2015 Butte Fire in Northern California, and other historical powerline wildfires, and categorizes fire-threat areas based on the risks that utility-associated wildfires pose to people and property.

A multistep process was used to develop the CPUC Fire-Threat Map. The first step was to develop Fire Map 1, a map that depicts areas of California where there is an elevated hazard for the ignition and rapid spread of powerline fires due to strong winds, abundant dry vegetation, and other environmental conditions. Fire Map 1 was developed by the California Department of Forestry and Fire Protection ("CAL FIRE") in collaboration with SED and other parties in R.08-11-005, and was adopted by the Commission in Decision ("D.") 16-05-036. Fire Map 1 was the foundation for development of the CPUC Fire-Threat Map, then referred to as Fire Map 2.

In D.17-01-009, the Commission adopted a workplan for further development and adoption of the CPUC Fire-Threat Map, building on Fire Map 1. The workplan provided for sequential development of Shape A, Shape B, and Shape C fire-threat maps, with Shape C being the planned final map. The Commission delegated primary responsibility for development of these maps to the Peer Development Panel ("PDP"), a group of utility mapping experts, with oversight and review by the Independent Review Team ("IRT"), a team of independent experts. CAL FIRE selected the members of the IRT and served as Chair of the IRT. Development of the CPUC Fire-Threat Map included input from many stakeholders, including investor owned and publicly owned electric utilities, communications infrastructure providers, public interest groups, and local public safety agencies.

Relevant to this Resolution, Ordering Paragraph 8 of D.17-01-009 established a process by which corrections to the CPUC Fire-Threat Map could be processed, as follows:

8. If the Safety and Enforcement Division (SED) learns of a material error in the Shape C Map of Fire Map 2, SED shall take the following actions, as appropriate: (a) Confer with the California Department of Forestry and Fire Protection; (b) correct the error by preparing a resolution for the Commission's consideration that explains the error, describes the correction, and provides a corrected Shape C Map in both a portable document format and geographic information system-readable format; and (c) replace the download links on the Commission's website to the erroneous Shape C Map with links to the corrected Shape C Map.

In D.17-06-024, the Commission eliminated the requirement for a Shape C fire-threat map, with the result that the Shape B fire-threat map would become the final CPUC Fire-Threat Map.

As provided by D.17-01-009 and D.17-06-024, the High Fire Threat District map is a composite of two map sources, which may overlap to some extent:

- Areas designated as Tier 2 and Tier 3 fire-threat areas in the CPUC Fire-Threat Map, and
- Areas designated as Tier 1 High Hazard Zones in the U.S. Forest Service-CAL FIRE joint map of Tree Mortality High Hazard Zones, which is updated approximately annually.

On July 31, 2017, the PDP served a draft, statewide CPUC Fire-Threat Map, which was subsequently reviewed by the IRT. A CPUC Fire-Threat Map approved by the IRT was filed in the proceeding on November 17, 2017, and parties were allowed to file written comments on the IRT-approved map, alternate map proposals (if any), and motions for evidentiary hearings. No motions for evidentiary hearings or alternate map proposals were received. As a result, the CPUC adopted the CPUC Fire-Threat Map effective January 19, 2018, via SED's approval of Tier 1 Advice Letters 5211-E and 3172-E.¹

¹ SED's disposition letter approving Advice Letters 5211-E/3172-E is available at: <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/energy-utility-advice-letter-and-tariff-information>

DISCUSSION

As part of the stakeholder engagement process in R.15-05-006, on July 12, 2017, the City of Healdsburg (“City”) submitted Ticket #98,² in which the City proposed that certain areas be added to Tier 2 in the CPUC Fire-Threat Map that was being developed.³

The IRT and PDP reviewed the City’s request and determined that most of the area identified by the City should be included in Tier 2. However, the IRT and PDP found that other portions of the City’s request were urbanized and did not meet the standards for inclusion in Tier 2. As a result, the IRT recommended that the PDP revise the map files submitted with the City’s request, which the PDP did through Ticket #190.⁴ On November 16, 2017, the PDP indicated that the City’s request, revised as requested by the IRT, was being incorporated into the final CPUC Fire-Threat Map. As described above, the Commission adopted the CPUC Fire-Threat Map effective January 19, 2018.

SED became aware in mid-2019 that there might be an error in the adopted CPUC Fire-Threat Map. Consistent with Ordering Paragraph 8 of D.17-01-009, SED reviewed the City’s Ticket #98 and the PDP’s Ticket #190 and consulted with CAL FIRE. SED concluded that there had been an inadvertent material error in finalizing the map, which resulted in improper exclusion from the adopted CPUC Fire-Threat Map of the portion of the City’s request that the IRT had determined should be included in Tier 2.

The City’s Tier 2 request in Ticket #98, the changes to Tier 2 approved by the IRT based on the City’s request, and Tier 2 areas that were included in the adopted CPUC Fire-Threat Map are depicted in Figure 1 below.

² Stakeholders were permitted to submit informal comments during the map development process, using ticket-based integrated project management/version control software. The City’s Ticket #98 with related correspondence is included in Appendix A to this Resolution.

³ In the CPUC Fire-Threat Map, Tier 2 includes areas determined to have elevated risk (including likelihood and potential impacts of occurrence) from wildfires associated with overhead utility powerlines or overhead utility powerlines also supporting communication facilities, including impacts to people or improved property. Tier 3 includes areas determined to have extreme risk (including likelihood and potential impacts of occurrence) from wildfires associated with overhead utility powerlines or overhead utility powerlines also supporting communication facilities, including impacts to people or improved property. All other areas in California are classified as Tier 1 and excluded from the CPUC Fire-Threat Map. For more information on the tier definitions and guidelines for determining the tier designations, see, “Independent Review Team Final Report on the Production of the California Public Utility [sic] Commission’s Statewide Fire Map 2,” filed by SED in R.15-05-006 on November 21, 2017, pp. 8-17.

⁴ The PDP’s Ticket #190 also included some minor “edge work” needed on the border with adjacent Tier 2 areas to ensure map consistency. Ticket #190 is included in Appendix A to this Resolution.

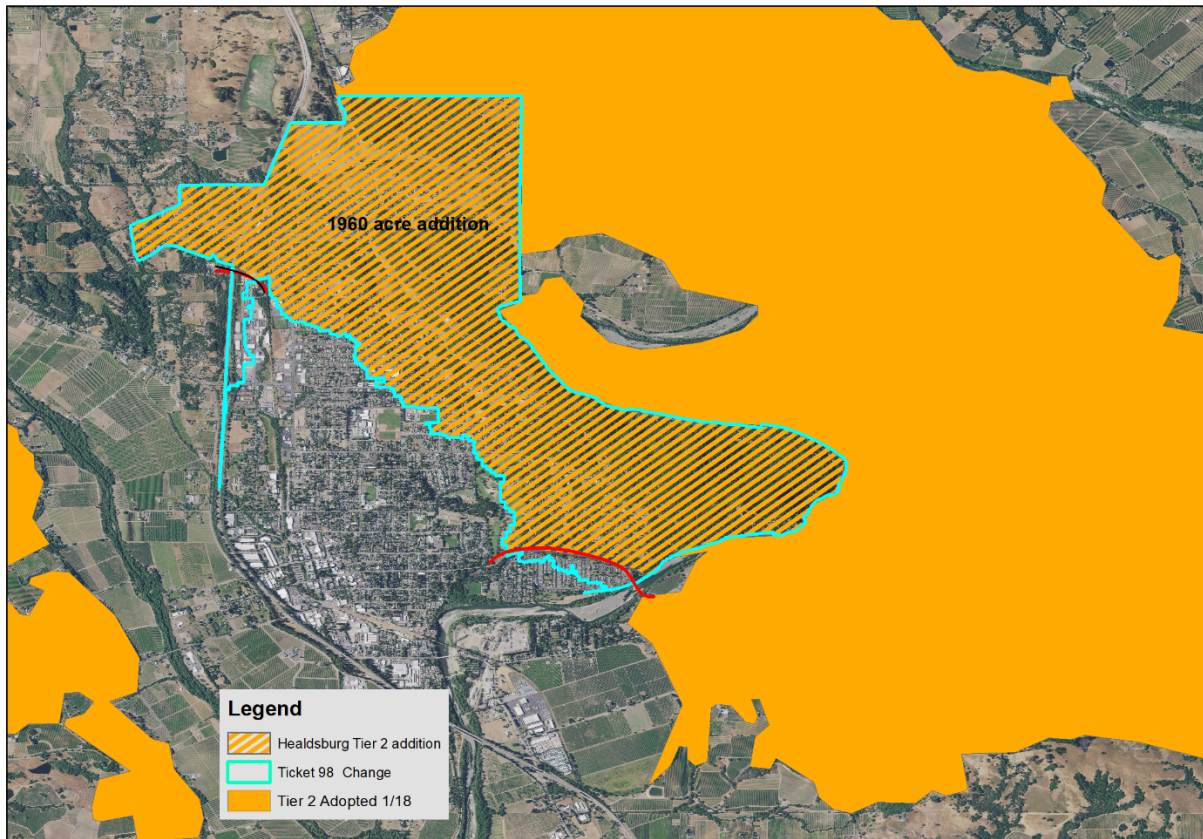


Figure 1. IRT's Determination of Tier 2 Addition Based on the City of Healdsburg's Request.

The solid orange area in Figure 1 indicates Tier 2 areas included in the CPUC Fire-Threat Map adopted effective January 19, 2018. The cyan-outlined area in Figure 1 indicates the area that the City's Ticket #98 requested be added to Tier 2. The hatched orange area indicates the area approved by the IRT but inadvertently omitted from Tier 2 in the adopted CPUC Fire-Threat Map.⁵

Consistent with the guidance in Ordering Paragraph 8 of D.17-01-009, SED recommends that the CPUC Fire-Threat Map adopted effective January 19, 2018, be corrected to include the area approved by the IRT as indicated in Figure 1. This Resolution approves a corrected CPUC Fire-Threat Map to fix the inadvertent omission depicted in Figure 1 and directs SED to update the download links on the Commission's website for the CPUC Fire-Threat Map with links to the associated corrected map files. These corrected map files will include both portable data format ("PDF") and geographic information system ("GIS") files and should be available within 30 days at: <https://www.cpuc.ca.gov/industries-and-topics/wildfires/fire-threat-maps-and-fire-safety-rulemaking>. The corrected CPUC Fire-Threat Map adds approximately 1,960 acres to the Tier 2 area.

⁵ The two red lines along the bottom border of the hatched orange area indicate exclusion of the portions of the City's request that the IRT and the PDP determined do not meet Tier 2 criteria.

COMMENTS ON DRAFT RESOLUTION

The Draft Resolution was served on the service list in R.15-05-006 on July 8, 2021. California Public Utilities Code § 311(g)(1) provides that this Resolution be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Comments were due on August 7, 2021. The Commission received no public comments.

FINDINGS

1. The Commission adopted the CPUC Fire-Threat Map effective January 19, 2018, via SED's approval of Tier 1 Advice Letters 5211-E and 3172-E.
2. SED became aware in mid-2019 that there might be an error in the adopted CPUC Fire-Threat Map.
3. After learning of the potential error, SED reviewed the City of Healdsburg's Ticket #98 and the Peer Development Panel's (PDP) Ticket #190, consulted with CAL FIRE, and concluded that there had been an inadvertent material error in finalizing the CPUC Fire-Threat Map.
4. The material error resulted in exclusion from Tier 2 in the CPUC Fire-Threat Map of the area in the City's request that met the Tier 2 criteria, as determined by the Independent Review Team (IRT).
5. Ordering Paragraph 8 in D.17-01-009 requires, if SED learns of a material error in the adopted CPUC Fire-Threat Map, that SED, as appropriate: (a) confer with CAL FIRE, (b) prepare a resolution for the Commission's consideration that explains the error, describes the correction, and provides a corrected map, and (c) replace the download links to the erroneous CPUC Fire-Threat Map with links to the corrected CPUC Fire-Threat Map on the Commission's website.
6. SED's preparation of the Draft Resolution complied with the guidance in Ordering Paragraph 8 of D.17-01-009.
7. To correct the material error in the adopted CPUC Fire-Threat Map, it is reasonable to adopt a corrected CPUC Fire-Threat Map that includes the correction proposed by SED.
8. It is reasonable to require SED to update the map download links on the Commission's website for the CPUC Fire-Threat Map with updated download links to corrected map files.
9. The Commission received no public comments.

THEREFORE, IT IS ORDERED THAT:

1. The corrected CPUC Fire-Threat Map that includes the correction to Tier 2 of the CPUC Fire-Threat Map described in this Resolution is adopted.
2. The Commission’s Safety and Enforcement Division shall replace the download links to the erroneous CPUC Fire-Threat Map on the Commission’s website with links to corrected map files within 30 days of the effective date of this Resolution, so that the corrected CPUC Fire-Threat Map will be available at:
<https://www.cpuc.ca.gov/industries-and-topics/wildfires/fire-threat-maps-and-fire-safety-rulemaking>.

All applicable regulations and requirements pertaining to Tier 2 areas of the CPUC Fire-Threat Map shall apply to areas consistent with the corrected CPUC Fire-Threat Map.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed, and adopted at a conference of the Public Utilities Commission of the State of California held on August 19, 2021; the following Commissioners voting favorably thereon:

/s/ Rachel Peterson
RACHEL PETERSON
Executive Director

MARYBEL BATJER
President
MARTHA GUZMAN ACEVES
CLIFFORD RECHTSCHAFFEN
GENEVIEVE SHIROMA
DARCIE HOUCK
Commissioners

Appendix A

Ticket #98 and Ticket #190

#98 City of Healdsburg Requested Changes to Shape B Map

Submitted	Received via	Requester
July 12, 2017, 14:22	Web Form	Tcrowley <tcrowley@ci.healdsburg.ca.us>

CCs

Ann Amman <aamman@ci.healdsburg.ca.us>, Chris Lautenberger <lautenberger@reaxengineering.com>, Dave Rich <rich@reaxengineering.com>, Dave Sapsis <dave.sapsis@fire.ca.gov>, David Saah <dsaah@sig-gis.com>, Shane Romsos <sromsos@sig-gis.com>, Tcrowley <tcrowley@ci.healdsburg.ca.us>

Status	Type	Priority	Group Affiliation	Assignee
Closed	Task	Due date	Normal	Peer Development Panel
				Chris Lautenberger

Map Reviewed	Name of Original Submitter	Organization Affiliation	Initiating Group
Shape B Map	Terry Crowley	City of Healdsburg	TL_Territory Lead

Target Group for Submission	Utility Service Area	County	PDP Approval Status
Peer Development Panel	City of Healdsburg	CA	Approved

Date submitted to IRT for review	IRT Approval Status
Jul 30	Approved

Tcrowley Jul 12, 14:21

Attached with this ticket are several files related to the changes request to the Shape B Map as well as correction to the City of Healdsburg's LAFCO service area boundaries. Should there be questions about these files or need additional information please let me know.

In compliance with the CPUC work plan, the City of Healdsburg has reviewed its service territory to define fire risk based upon the following: fuels and weather, topography, fire suppression response, fire history, the presence of fire breaks or defensible space, areas within designated Wildland Urban Interfaces, population density, and the risk to improved lands and properties. In performing this review the City made use of the existing approved Wildland Urban Interface (WUI) zones and the findings supporting those areas within Healdsburg service territory. Primarily the WUI zones were established due to the adjacency of improved land and structures to wildland vegetation, narrow and windy roads constraining access to these areas, and the steep slopes found on and around Fitch Mountain.

As the WUI zones define specific areas within the City of Healdsburg as having high and moderate fire risk, the City's current WUI zones present a solid basis for defining the risk associated with overhead power-lines and aerial communication facilities. Furthermore, in assessing the risk of utility related wildland fires, the CPUC recommends identifying areas contained within WUI zones as having an elevated risk.

The City of Healdsburg is recommending that areas outside of the current WUI zones be classified as Tier 1, the lowest category for fire-hazard. For areas of the WUI within the City's service territory staff is recommending designating these areas as Tier 2 or areas generally defined as: areas of elevated risk from wildfires associated with overhead utility powerlines or overhead utility powerlines also supporting communication facilities. In defining areas within the WUI as Tier 2, the utility fire-map relies on the findings that developed the adopted WUI zones and provides consistency in the management of these areas.

In developing this recommendation, City utility staff met with and discussed these recommendations with; the Fitch Mountain Homeowners Association, the Healdsburg Fire Department, and gained approval of these recommendations from the City Council of the City of Healdsburg during a public meeting. Each of these stakeholders voiced their agreement and approval of the City's recommendation.

Chris Lautenberger Jul 12, 18:16

Thank you for the submission. We can't work with .lpx files -- please attach .kml or .shp files showing the proposed Tier 1 / Tier 2 areas. Thank you.

Chris Lautenberger

Dave Sapsis Jul 12, 20:17

Can you also provide data and documentation regarding the city's WUI designation? Based on narrative and comparisons to Cal Fire's DRAFT data provided to the county in 2007 to initiate local validation for LRA VHFHS, the data may be based on that product's High and Moderate classifications

http://frap.fire.ca.gov/webdata/maps/sonoma/fhszl06_1_map.49.pdf

Dave Sapsis
CAL FIRE
Fire and Resource Assessment Program
916.445.5369
916.320.8767

Tcrowley Jul 12, 21:00

Chris,

The attached zip file has the shape files. When we provide PG&E with the shape files in mid-June they requested the layer files (.lpx) so we thought to include them here as well.

If the included shape files don't work, please let me know.

TERRY CROWLEY P.E. | Healdsburg Utility Director
City of Healdsburg Utility Department
401 Grove Street, Healdsburg CA 95448
707.431.3346 | cityofhealdsburg.org

Chris Lautenberger Jul 15, 08:40

Hi Terry - I took a look at the Shapefile in the .zip archive -- it contains several features related to fire hazard severity zones, but I didn't see anything related to proposed Tier 1 / Tier 2 designations for the current utility fire threat mapping effort. The .lpx files are proprietary formats that are compatible only with ESRI (i.e., ArcGIS) products. Can you attach .shp or .kml files for the proposed Tier 1 / Tier 2 areas as identified in the attachment "Utility Fire Map_Tiers1&2.pdf"? Thanks.

Chris Lautenberger

Tcrowley Jul 17, 15:05

Chris,

I've forwarded your comments to our GIS person. She will be able to clarify the shape files. In the meantime the attached shows the areas of the tiers as well as the Shape B map provided by the CPUC. These PDF's were developed with the data within the shape files.

Terry

Tcrowley Jul 17, 15:12

Dave,

The City's WUI zones are areas of high fire hazard as identified by Cal Fire. Yes, my understanding is that much of the areas were identified by CALFire's 2007 data but also included some local input/knowledge from the Healdsburg Fire Department. The zone of high fire hazard includes much of Fitch Mountain, particularly its western and southern slopes, and the wooded and brush-covered ridges that run through Healdsburg's service area. The concern in these zones is primarily for fire equipment accessibility, and the interface between flammable wildland vegetation and improved lands and residential structures. Existing streets in the Fitch Mountain area are relatively narrow and include sharp turns and dead ends. Because of these constraints, the City uses smaller apparatus to respond to fires in this area. In addition, the existing water system in the area has limited storage capacity, particularly the zones serving the areas within what the City is proposing for Tier 2.

The findings that developed the City's WUI zones seem very consistent with the guidelines provided by the CPUC fire map team for differentiating between Tier 1 and Tier 2 areas.

Terry

Tcrowley Jul 17, 16:59

Chris & All,

See the attached zip files. These should clarify the boundaries. The first two files show the area of each Tier and the 'UtilityServiceArea' file correctly encompasses the City's service territory.

If you still have questions let me know.

TERRY CROWLEY P.E. | Healdsburg Utility Director
City of Healdsburg Utility Department
401 Grove Street, Healdsburg CA 95448
707.431.3346 | cityofhealdsburg.org

From: Terry Crowley
Sent: Monday, July 17, 2017 3:05 PM
To: 'CPUC WildFire Map Review Team'
Subject: RE: [SIG] Re: City of Healdsburg Requested Changes to Shape B Map

Chris,

I've forwarded your comments to our GIS person. She will be able to clarify the shape files. In the meantime the attached shows the areas of the tiers as well as the Shape B map provided by the CPUC. These PDF's were developed with the data within the shape files.

Terry

Chris Lautenberger Jul 18, 09:49

Hi Terry - Confirming successful receipt of the Tier1 / Tier 2 shapefiles attached below. Thanks!

Chris Lautenberger

Chris Lautenberger Jul 30, 12:04

See attached (healdsburg.kml) for City of Healdsburg's service territory per CEC.

The GIS data attached by the TL contain 43 separate polygons/features. However, the TL is proposing one contiguous Tier 1 area and one contiguous Tier 2 area. For that reason, this PDP reviewer dissolved these polygons into two separate polygons (see attached for zonal statistics and auto-numbered polygons).

The TL proposes Polygon 1 for Tier 1 classification and Polygon 2 for Tier 2 classification. These classifications appear to be based on WUI Zones which are in turn based on Fire Hazard Severity Zones.

The Tier 1 / Tier 2 boundary proposed by the Territory Lead is reasonable, but it likely includes too much developed areas as Tier 2 that should probably be Tier 1. Attached (healdsburg_possible_tier2_exclusions.kml) are some areas that may be appropriate for Tier 1.

The PDP reviewer approves the ticket as-submitted, but requests that the Territory Lead review the attached potential Tier 2 exclusions during the IRT review period and determine if Healdsburg would like to propose Tier 1 areas. The PDP is available for consultation on this matter.

Sending to the IRT for review.

Chris Lautenberger

Shane Romsos Jul 31, 09:06

Chris and Terry -
The IRT has received your request to review map changes associated with Ticket [#98](#).
Thank you,

Shane

Shane Romsos Sep 24, 22:52

Terry -

Please see attached IRT Review of Ticket [#98](#), City of Healdsburg.

IRT Summary Determinations

Approvals

- Polygon 1 (reclassify as Tier 1)

Approved, revision recommended

- Polygon 2 (reclassify as Tier 2)

Denied

- None

Denied, Pending Revisions

- None

Shane

Support Software by Zendesk

#190 Re: City of Healdsburg Requested Changes to Shape B Map

Submitted	Received via	Requester
November 16, 2017, 13:48	Closed Ticket	Chris Lautenberger <lautenberger@reaxengineering.com>

CCs

Ann Amman <aamman@ci.healdsburg.ca.us>, Chris Lautenberger <lautenberger@reaxengineering.com>, Dave Rich <rich@reaxengineering.com>, Dave Sapsis <dave.sapsis@fire.ca.gov>, David Saah <dsaah@sig-gis.com>, Shane Romsos <sromsos@sig-gis.com>, Tcrowley <tcrowley@ci.healdsburg.ca.us>

Status	Type	Priority	Group Affiliation	Assignee
Closed	-	-	Independent Review Team	Dave Sapsis

Map Reviewed	Name of Original Submitter	Organization Affiliation	Initiating Group
Shape B Map	Terry Crowley	City of Healdsburg	TL_Territory Lead

Target Group for Submission	Utility Service Area	County	PDP Approval Status
Peer Development Panel	City of Healdsburg	CA	Approved

Date submitted to IRT for review	IRT Approval Status
Jul 30	Approved

Chris Lautenberger Nov 16, 13:48

City of Healdsburg submitted multiple polygons (Ticket 98) that as part of the PDP review process were distilled down to two: 1) A Tier 2 removal request, and 2) a Tier 2 addition request. The Tier 2 removal request is moot because it's entirely outside of Shape B1. However, the Tier 2 addition request was based on a pre-existing map (Fire Threat or FHSZ) and needed improved edge work. The IRT ruling on the Tier 2 addition was approved, with a recommendation for the PDP to revise.

Attached are two .kml files: The original (TL) submission and the revised (PDP) recommendation. The latter is now incorporated into the final map build.

Chris Lautenberger

Chris Lautenberger Nov 16, 13:49

Attachments here: Chris Lautenberger

Shane Romsos Dec 8, 08:34

Closing Ticket

Shane

Support Software by Zendesk