Human-caused Fires WebGIS Application for Community Education & Resiliency

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Pacific Northwest Region

Data Resources Management

Pacific Northwest (PNW) Wildfire Coordination Group helps build wildland fire resiliency among Fire Adapted Communities (FACs) through annual community visits by federal interagency Fire Prevention & Education Teams (FPETs)

FACs are located in a wildfire prone areas and actively prepare for the eventuality of wildland fire.

FACs approach wildland fire preparation by integrating people, structures, businesses, infrastructure, and cultural resources with the natural area.

- National fire incident dataset created (& annually updated) using wildfire records of federal, state, and local fire organizations' reporting systems.

  Spatial wildfire occurrence data for the United States is available at:

  https://www.fs.usda.gov/rds/archive/Product/RDS-2013-0009.4/

  (or use **https://tinyurl.com/firedata**)

- Supports the national interagency Fire Program Analysis (FPA) system

- The data used by PNW FPETs subset of the national dataset for Oregon and Washington.

Create lots of paper maps with a LOT of information on them…

for a lot of areas
some we know now
some we'll know later

Some data we must
have, but there are
SO MANY data points
that we'll have
to figure out how
much can fit on map.

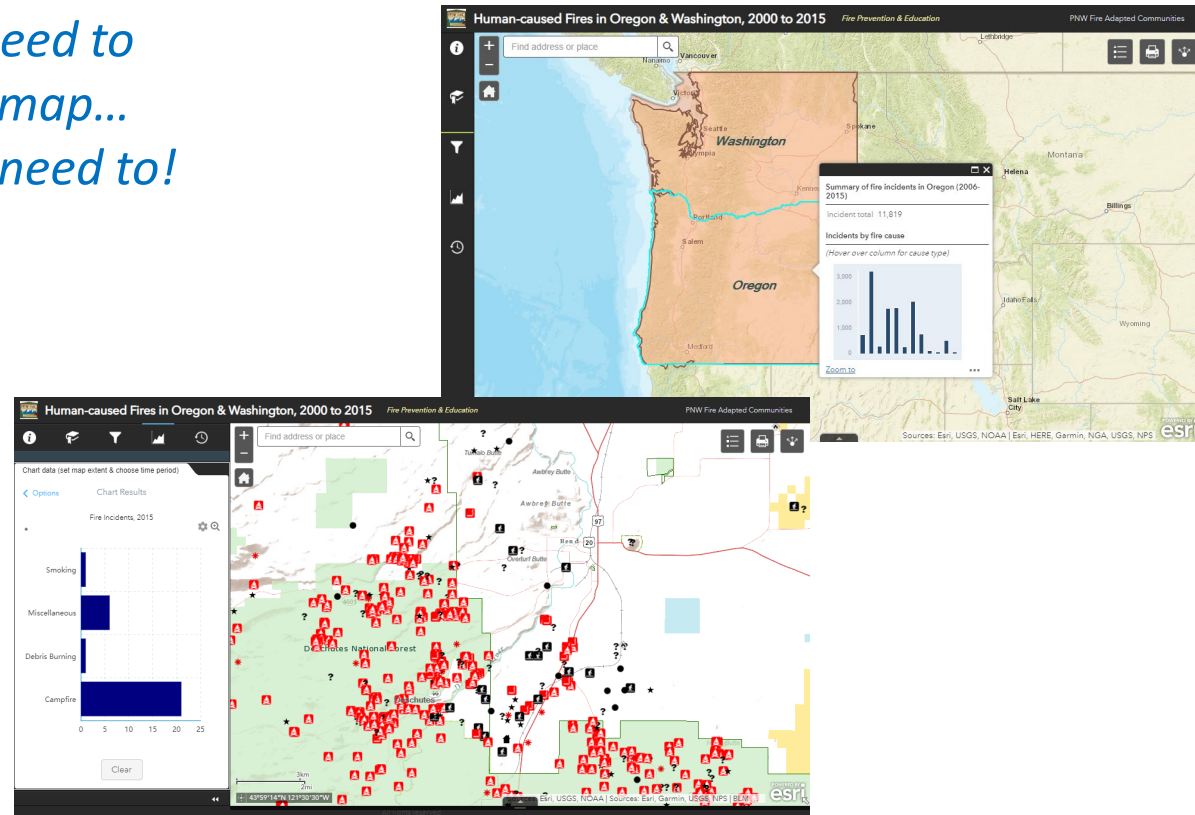What if… a web-GIS application is designed that that offers FPETs and fire support staff flexibility and data consistency?

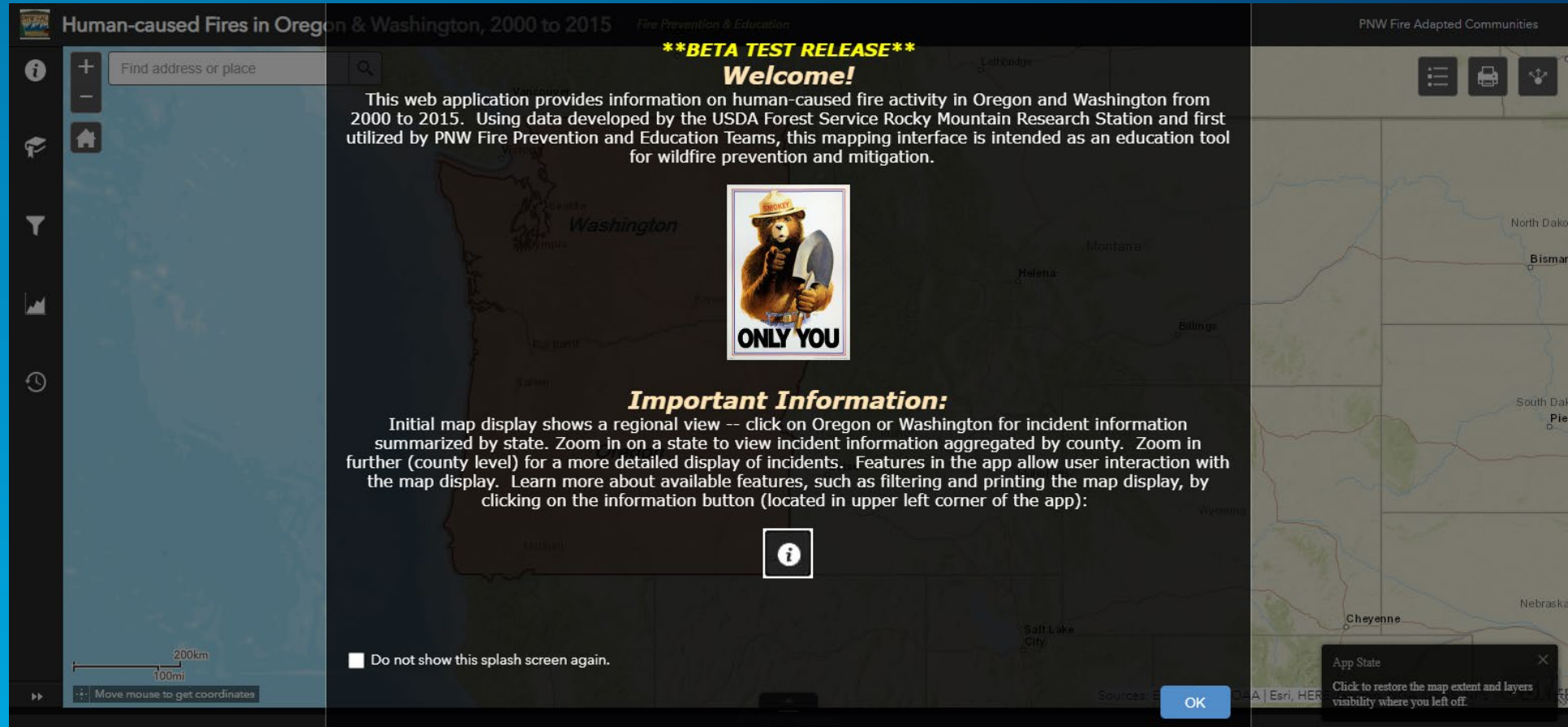*Still need to print map… if we need to!*

Technical Demonstration

Application available for view at:
https://tinyurl.com/FPETapp

The Welcome Splash Screen states application's purpose,
and where to find information on "How To Use" app

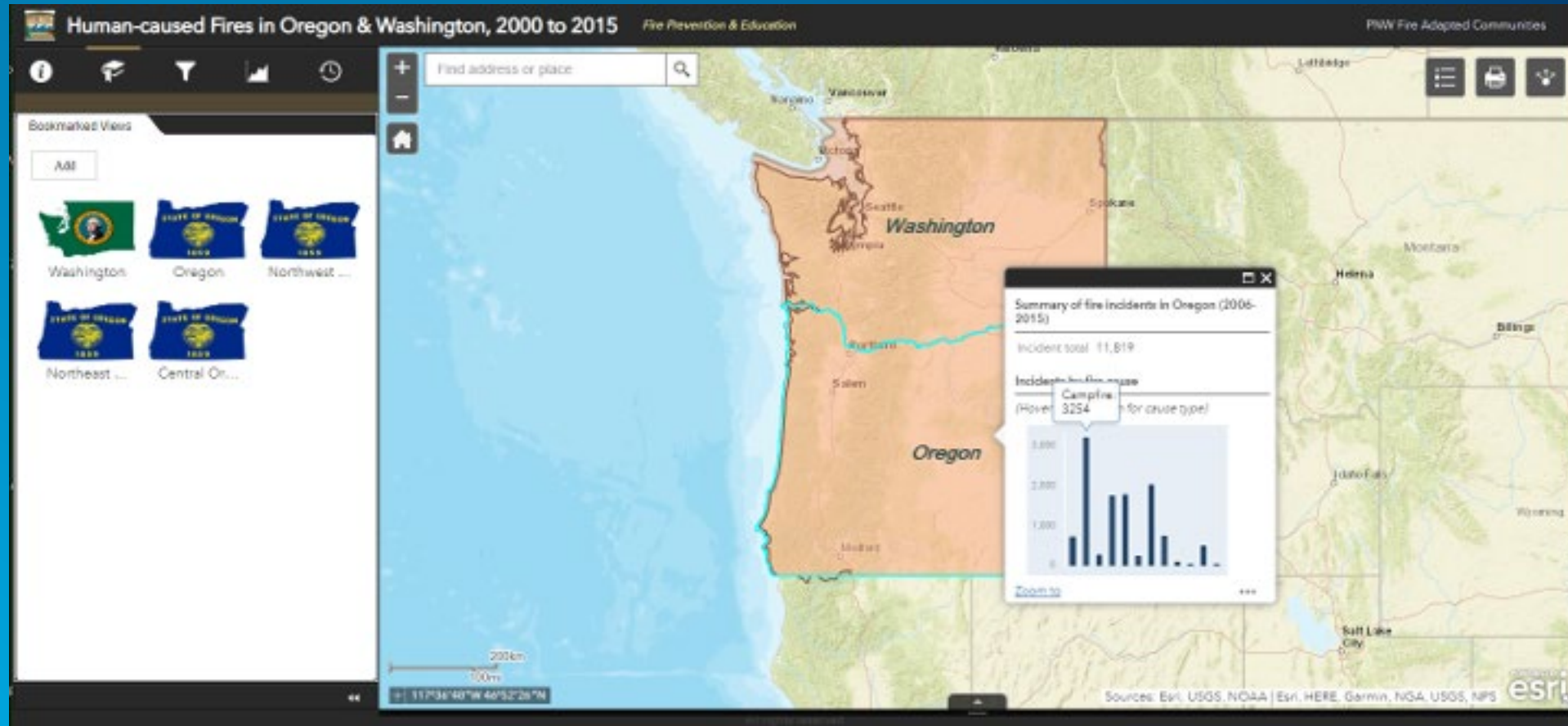Information Button includes more details on app development, source data, and how to interact with application features
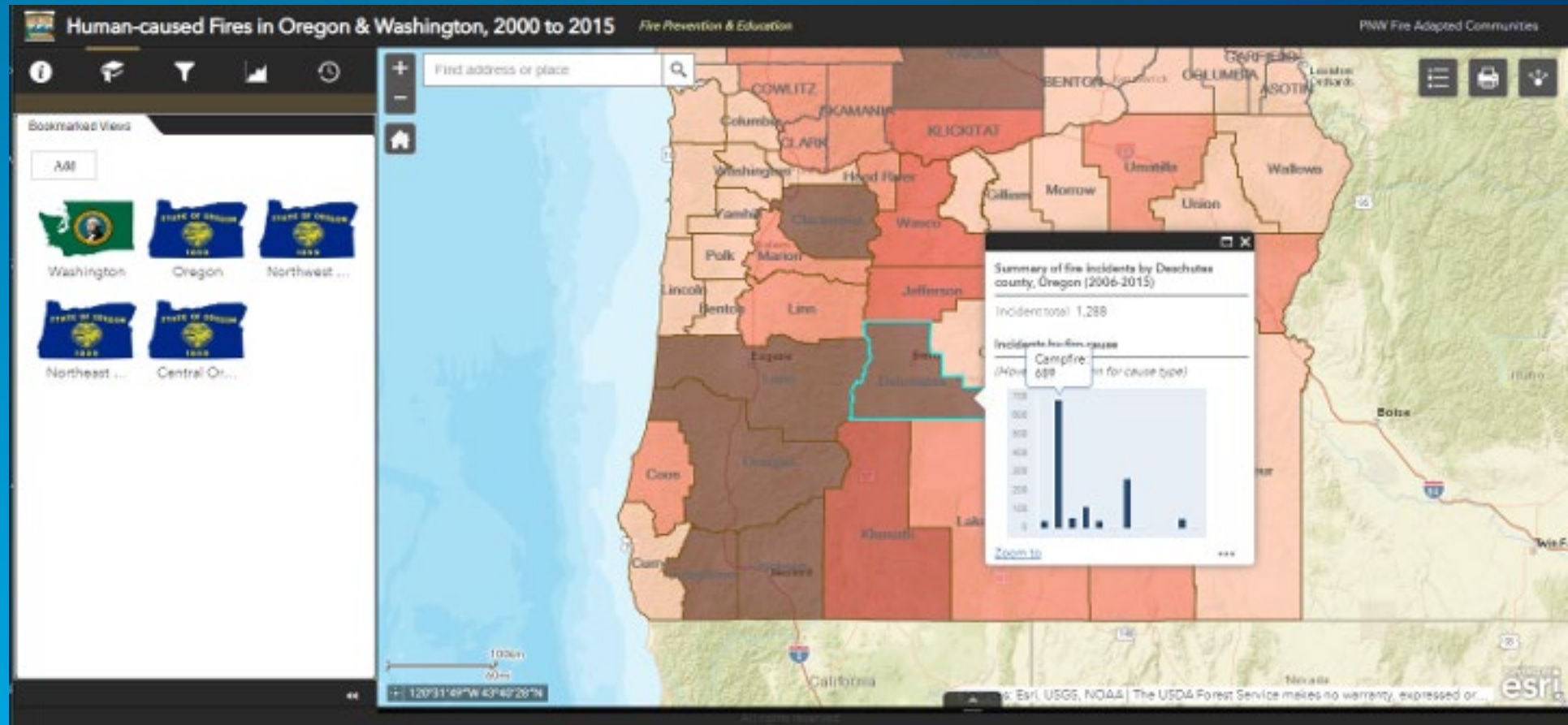
Bookmarks can be preset for team use ahead of time

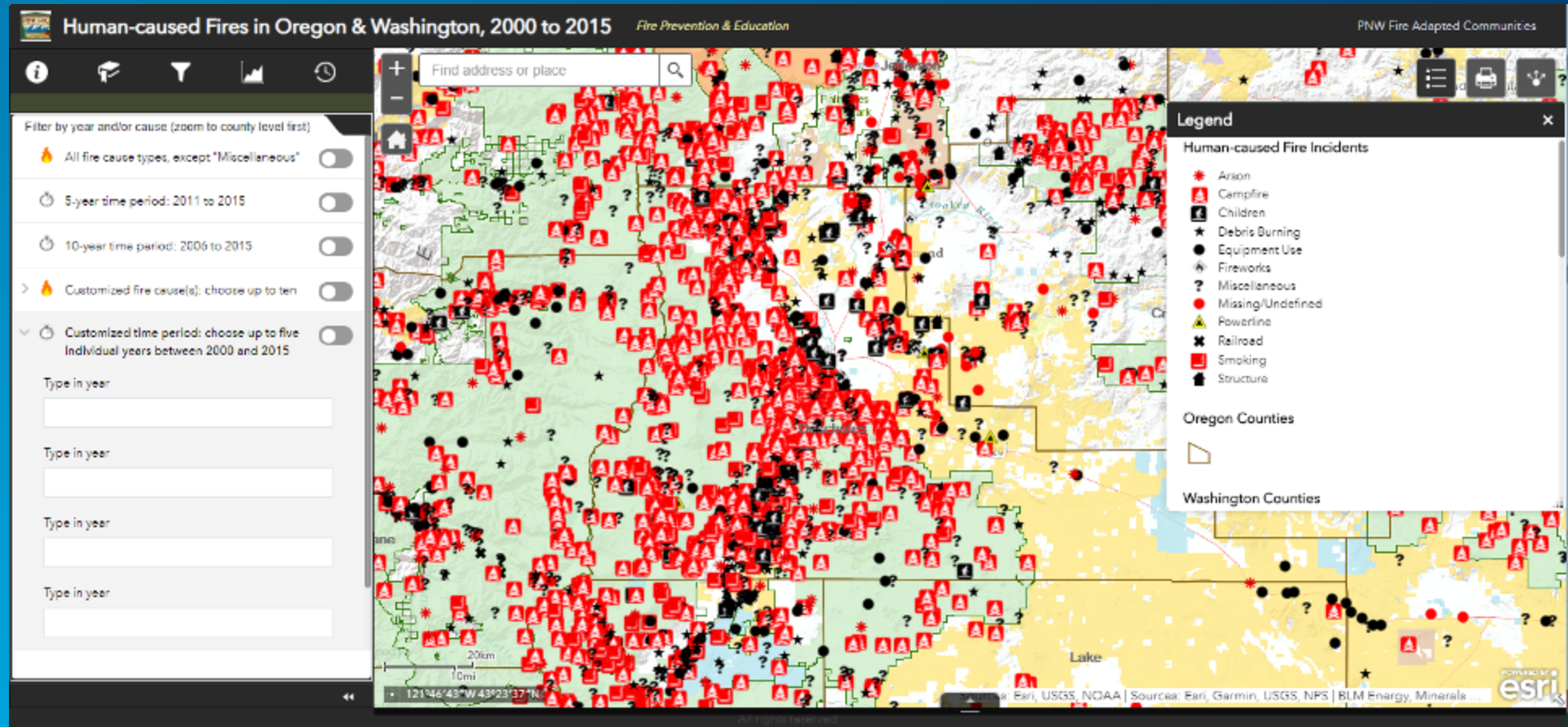Looking a state-level scale, pop up shows chart of human-caused fire incidents for selected state

Looking within the state, counties are symbolized by total fire incidents
Pop up shows chart of human-caused fire incidents for selected county
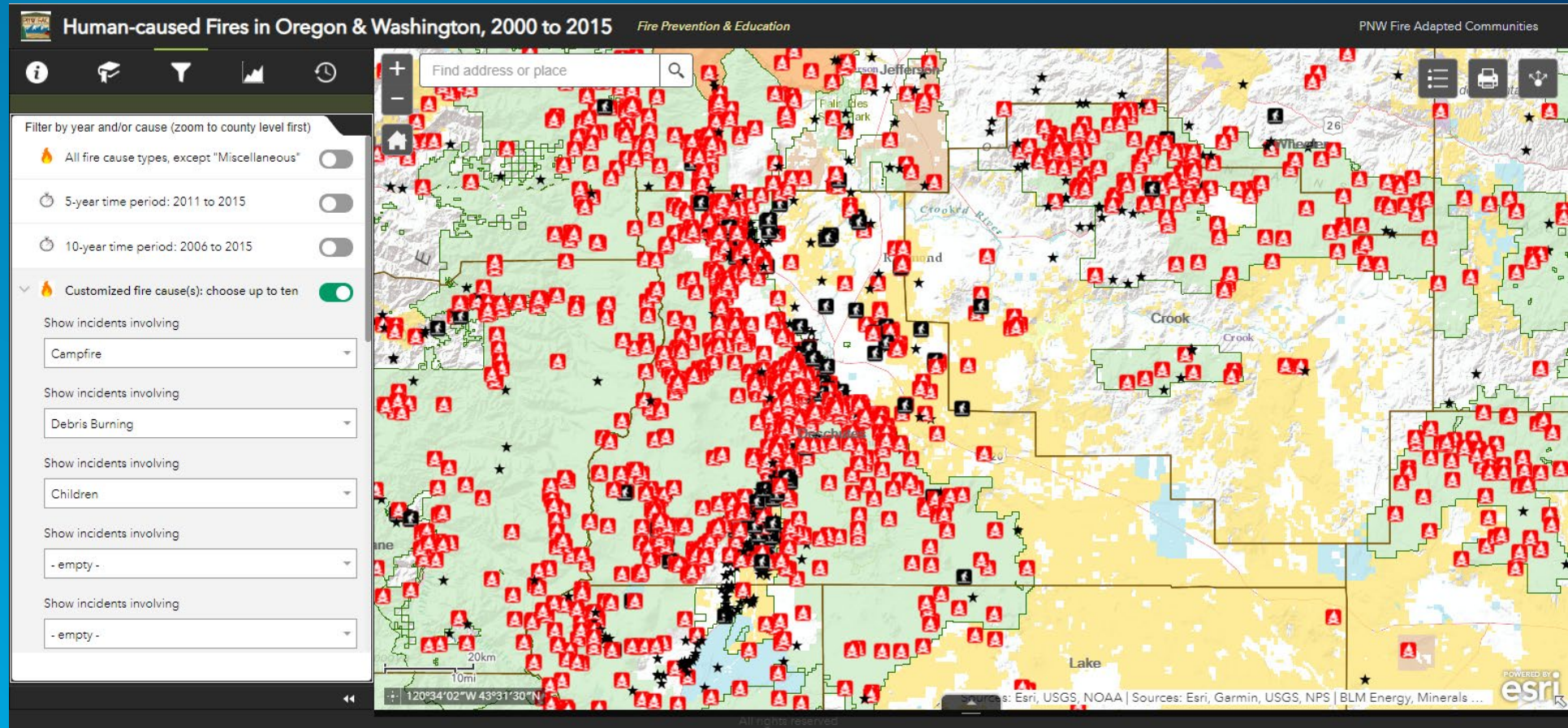
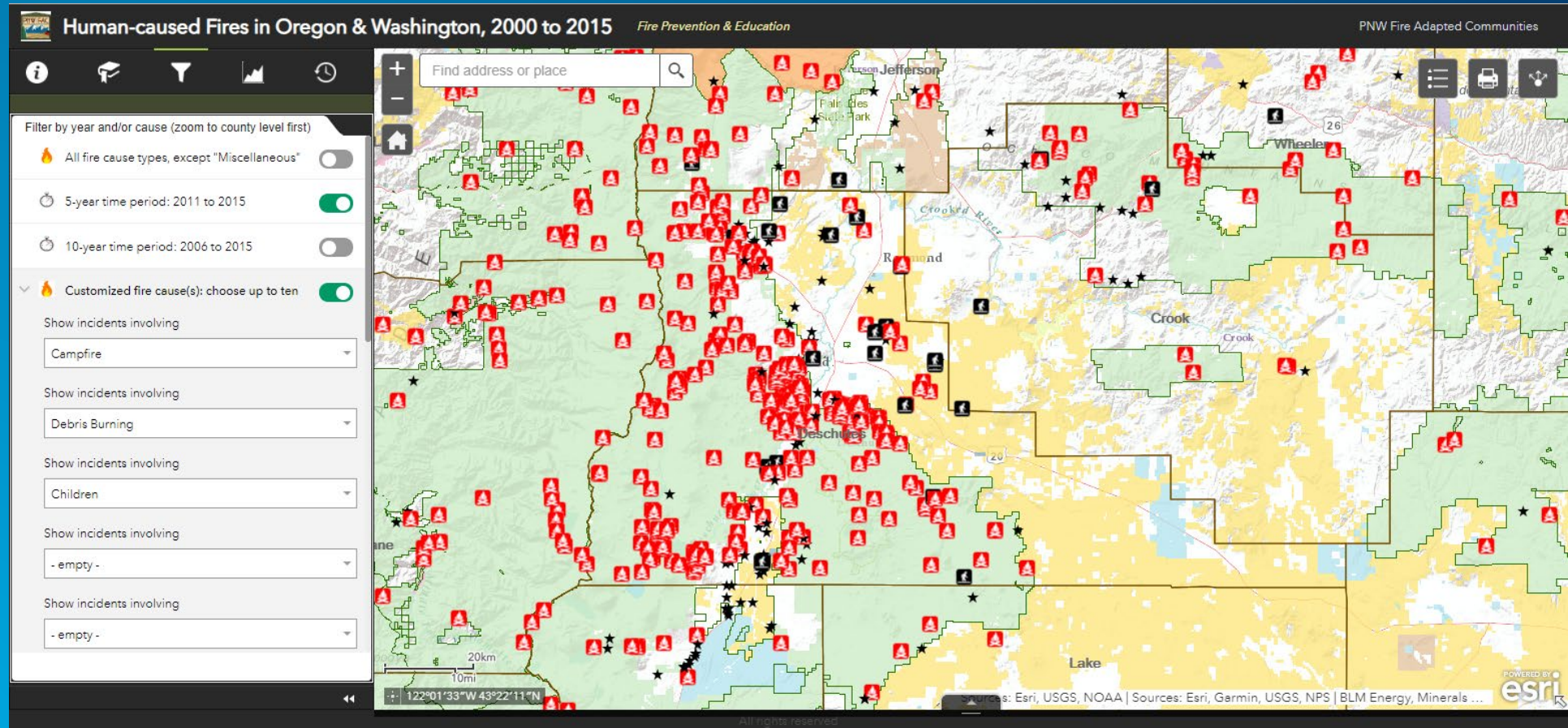A wealth of data!... but without filtering it is overwhelming to make sense of

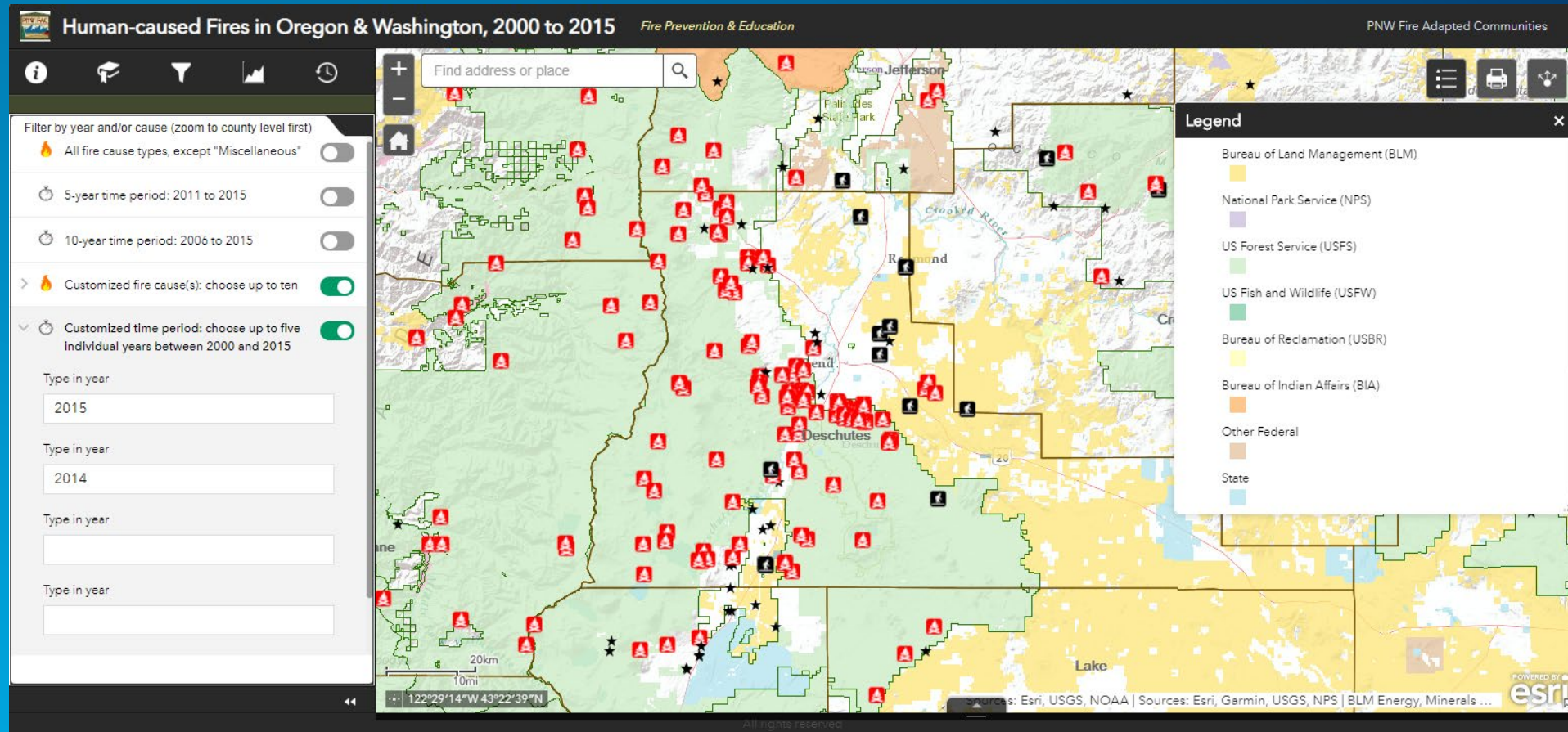# Ability to filter by top three cause types for area of interest

# Ability to add filter for time period of interest (5-year span)

Human-caused Fires in Oregon & Washington, 2000 to 2015 *Fire Prevention & Education*   PNW Fire Adapted Communities

Filter by year and/or cause (zoom to county level first)

- All fire cause types, except "Miscellaneous"
- 5-year time period: 2011 to 2015
- 10-year time period: 2006 to 2015
- Customized fire cause(s): choose up to ten

Show incidents involving

Campfire

Show incidents involving

Debris Burning

Show incidents involving

Children

Show incidents involving

- empty -

Show incidents involving

- empty -

Find address or place

Ability to customize time period of interest (i.e., 2014 & 2015)

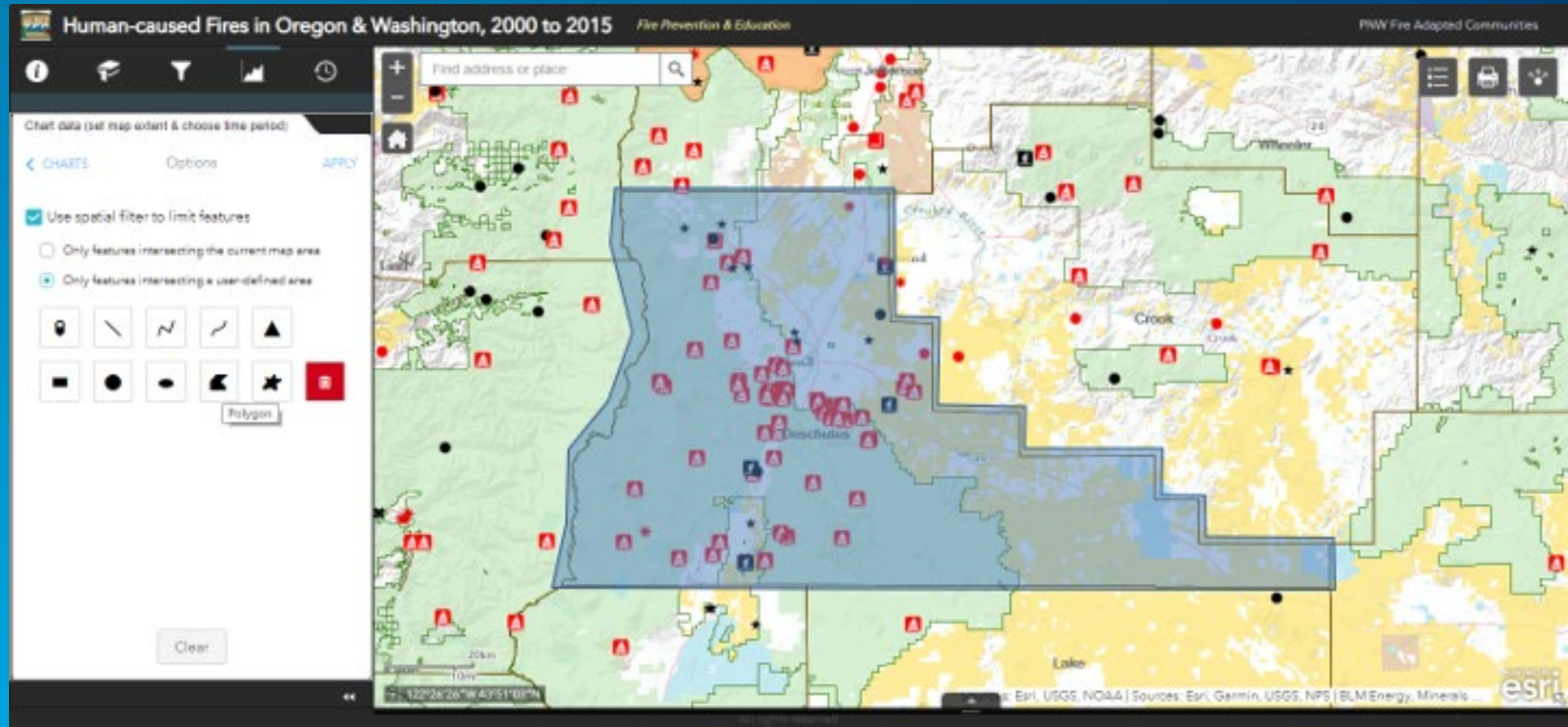# Ability to assess spatial distribution on different public lands
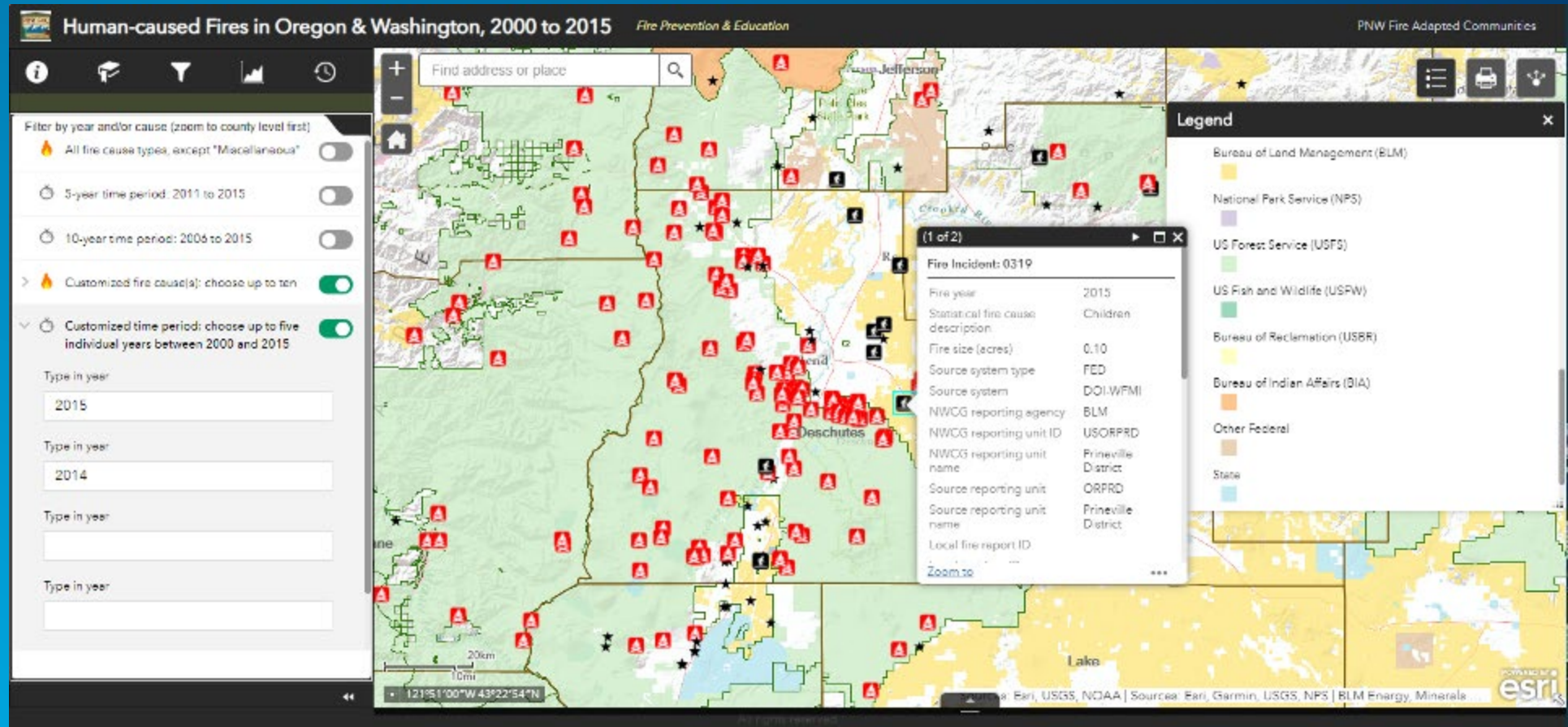
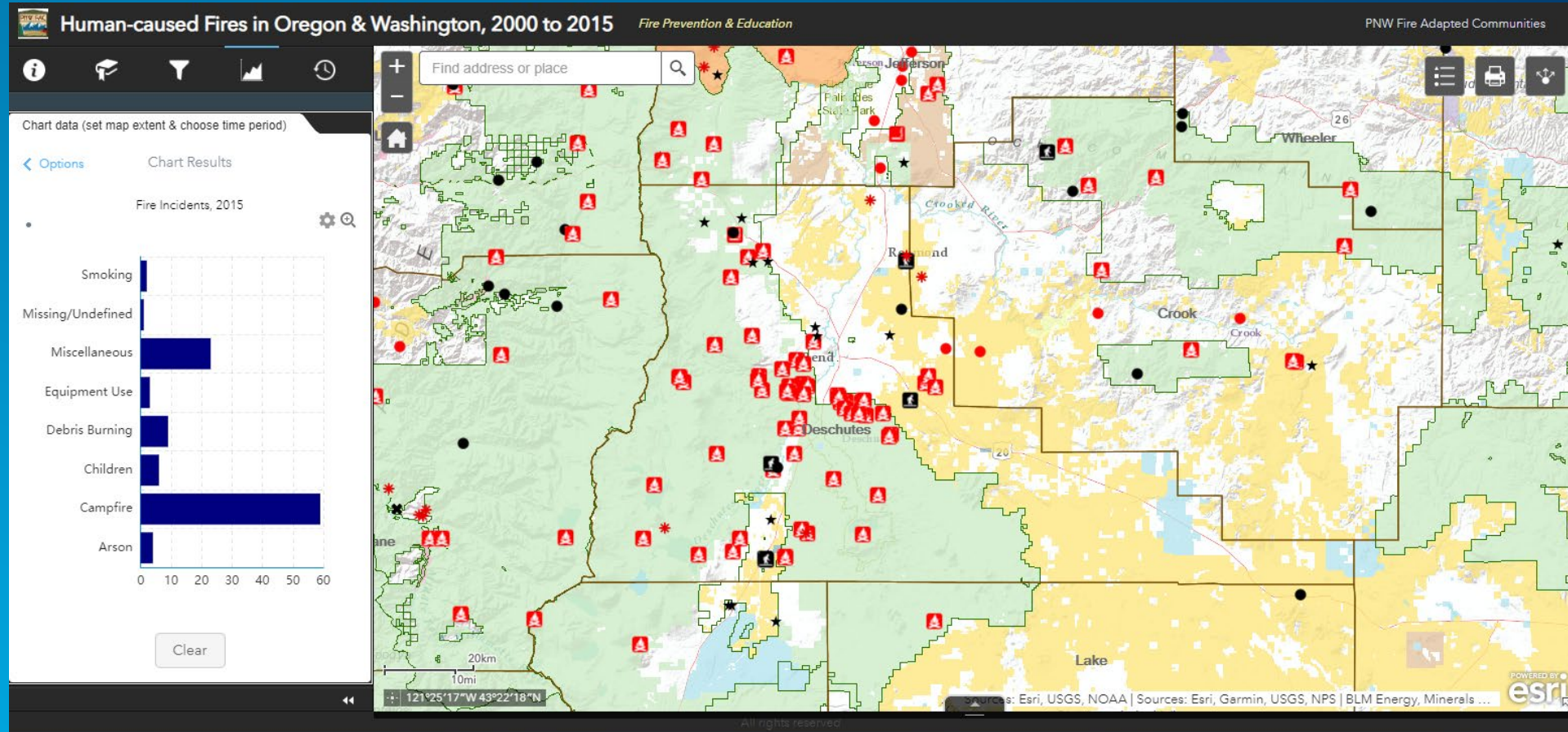# View of all data for 2015, with exception of Miscellaneous
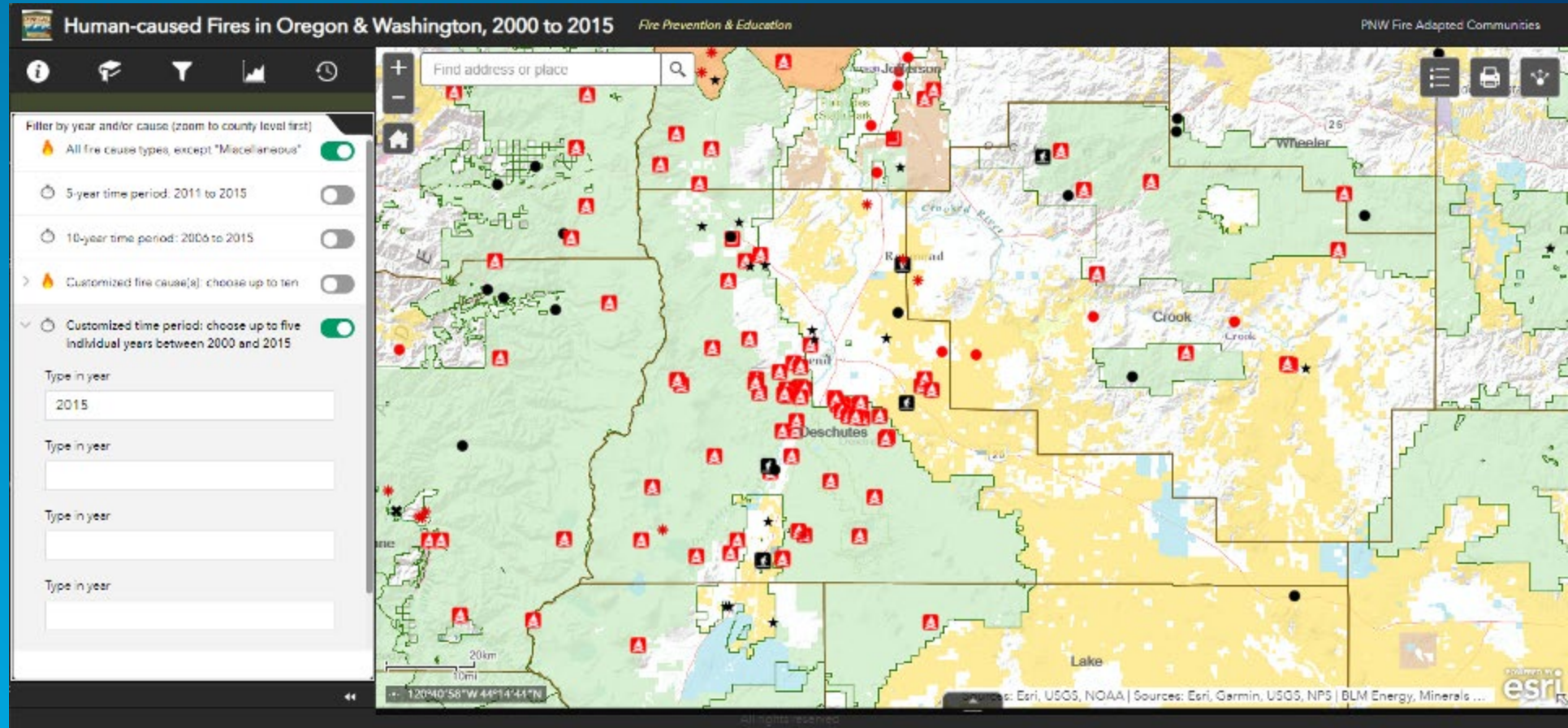
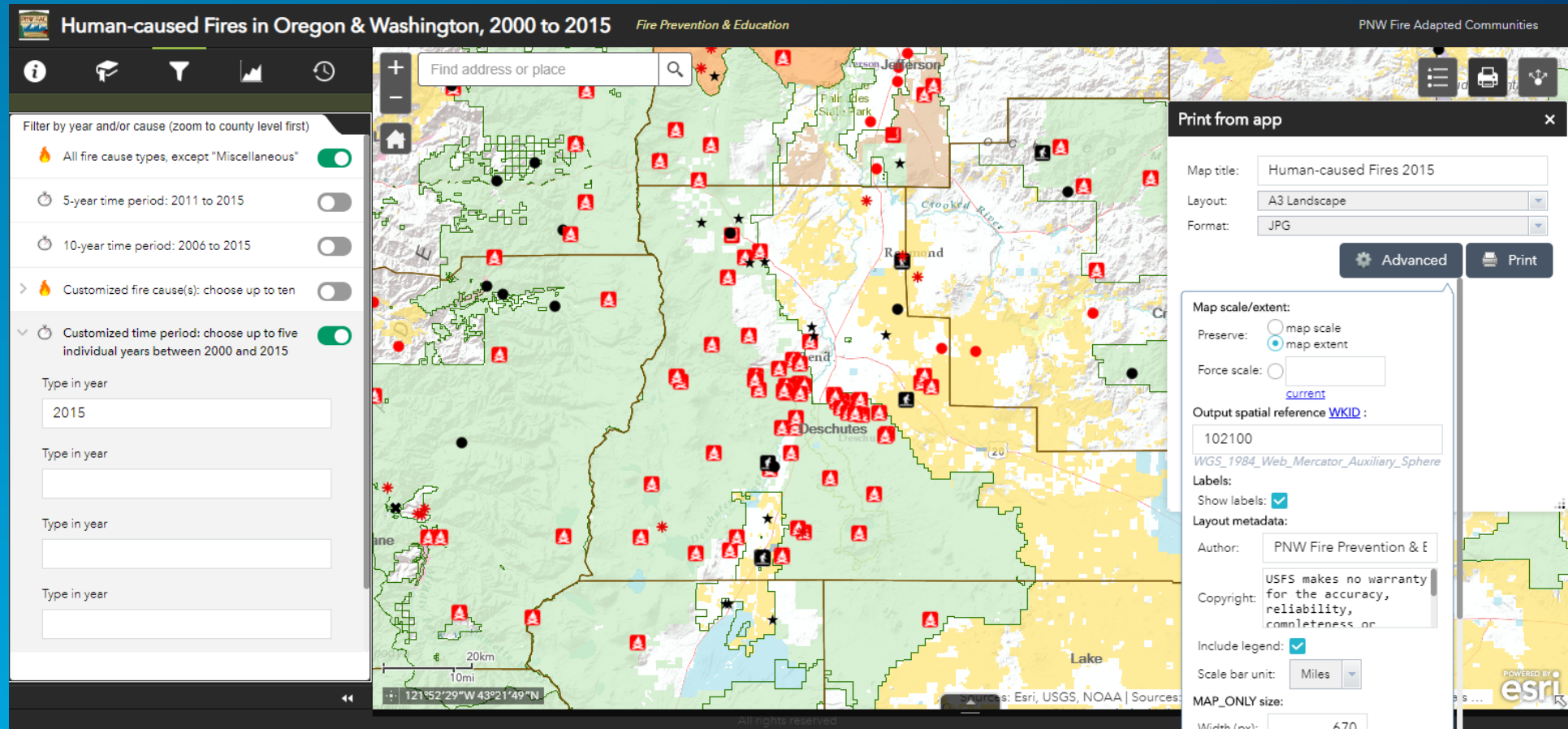# Ability to establish areas of interest for charting statistics

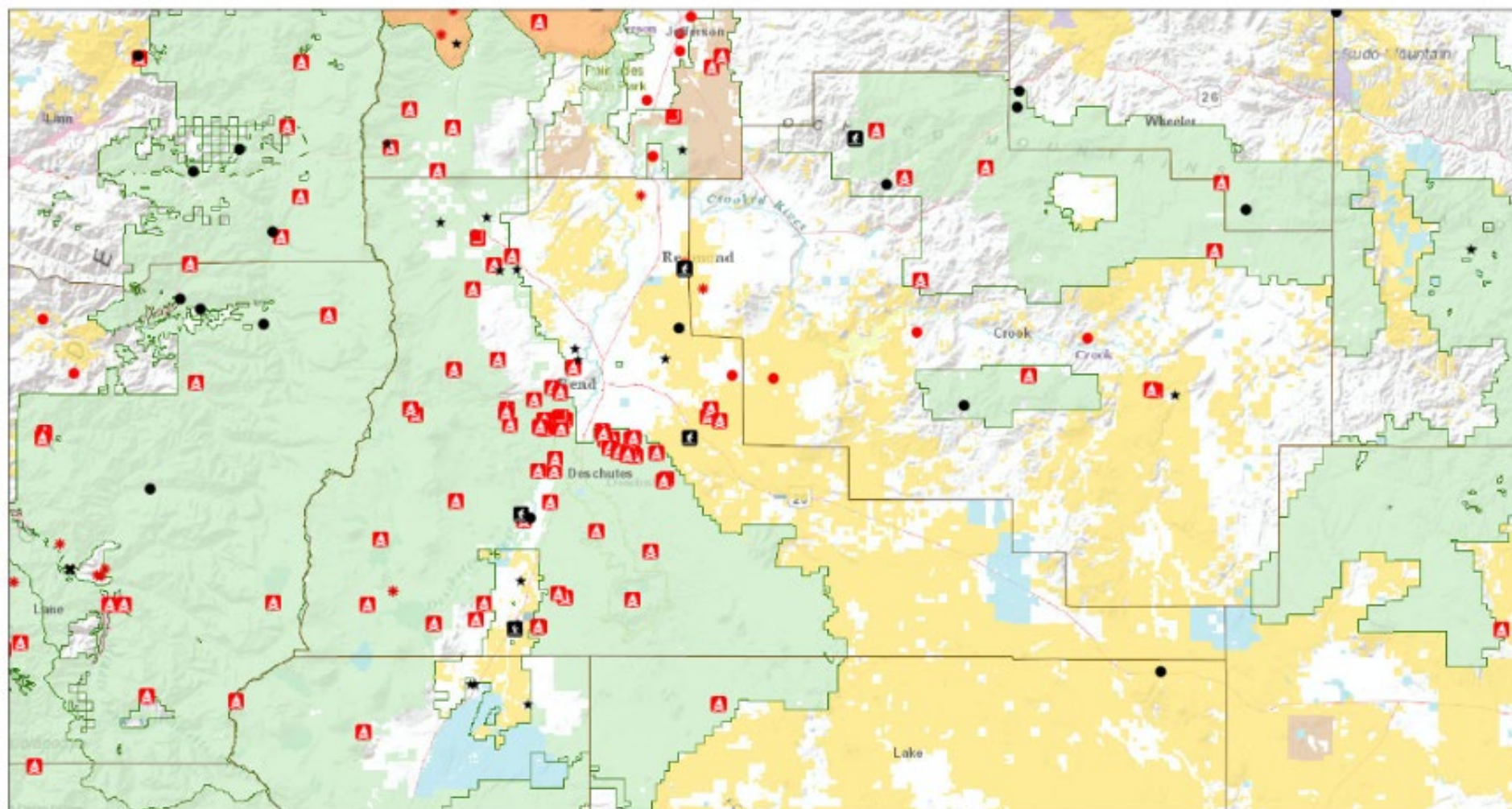# Chart statistics for areas of interest on the fly

Ability to create customized maps in field

Map
Output

Human-caused Fires 2015

Ability to share customized views of app
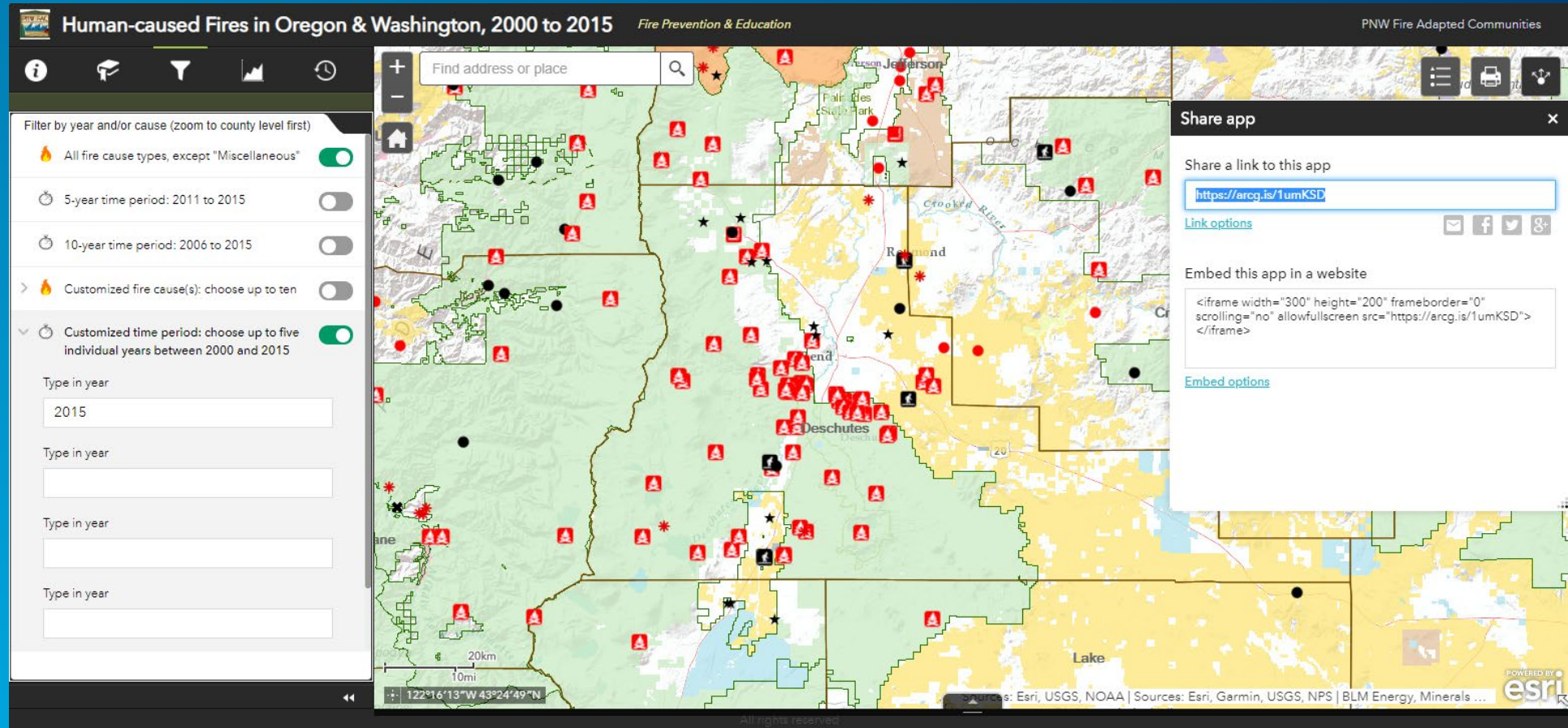
- Interest in a nationwide app or "sister apps" for each Forest Service administrative region

  Considerations:
    - Wealth of data from full dataset could cause issues in app (i.e., widgets functioning properly and timely)
    - Who will manage long term

- Need for some additional field testing of existing app, and design adjustments
  - Will be adding in newer data years recently made available

Questions?

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