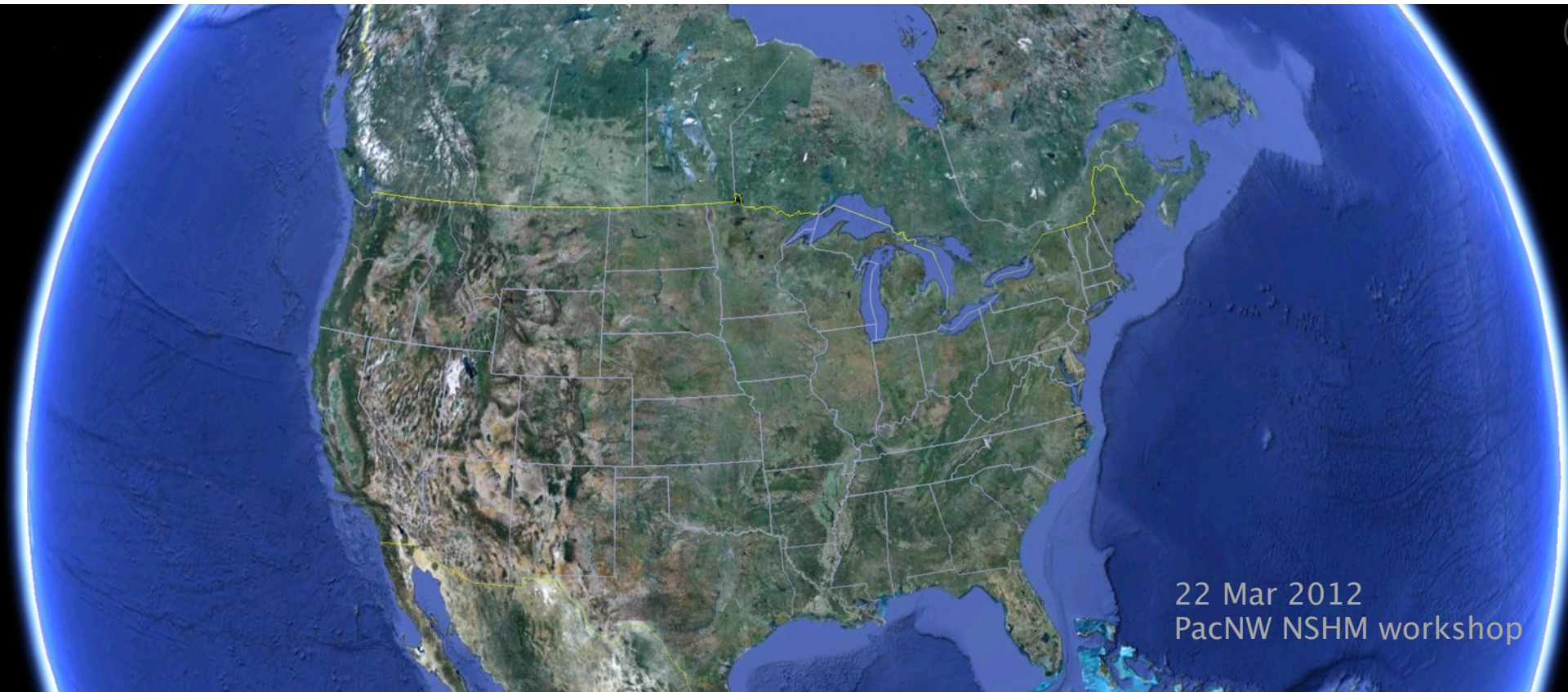# USGS National Fault Datasets

Kathy Haller

22 Mar 2012
PacNW NSHM workshop

Quaternary faults vs. NSHM sources
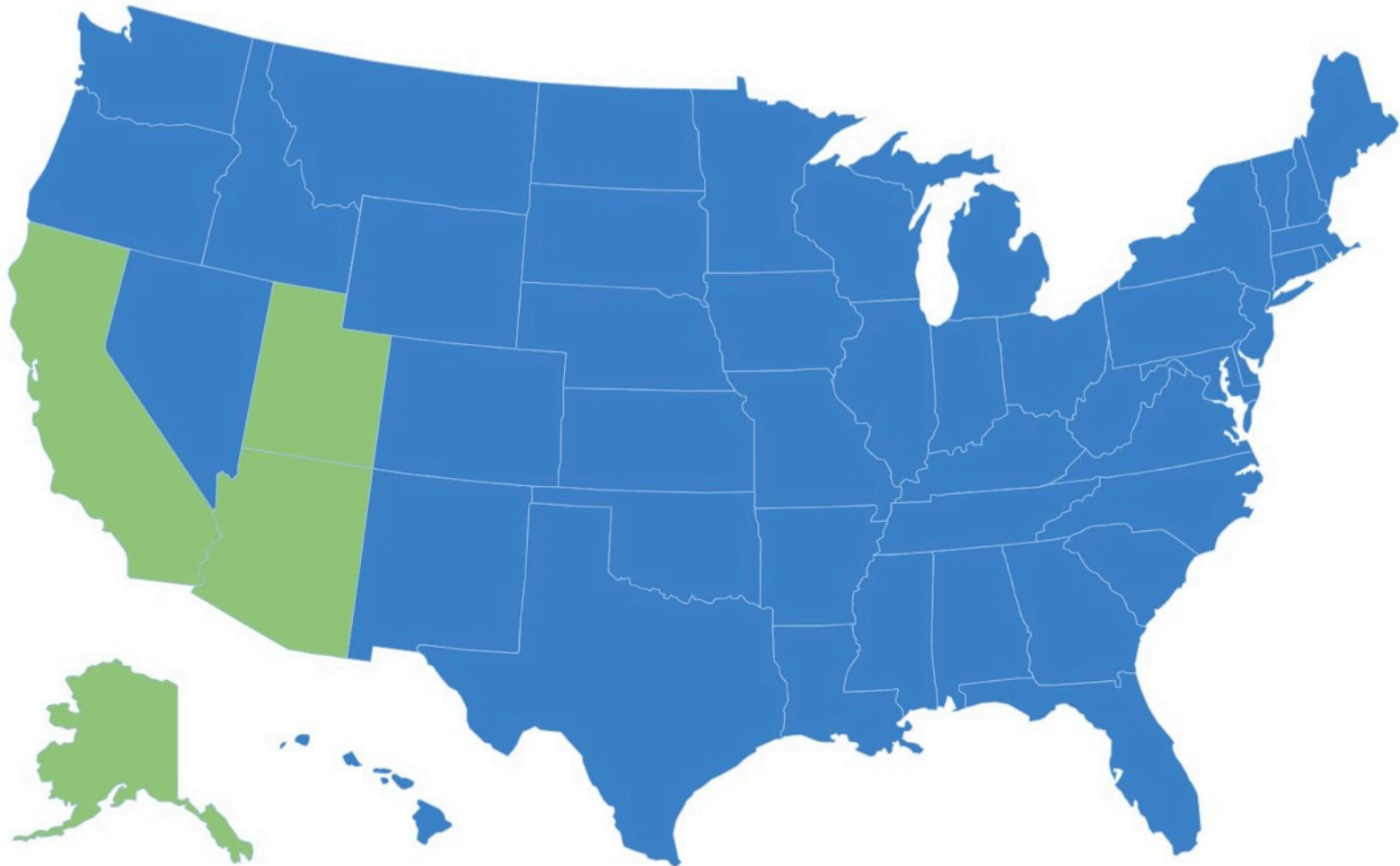
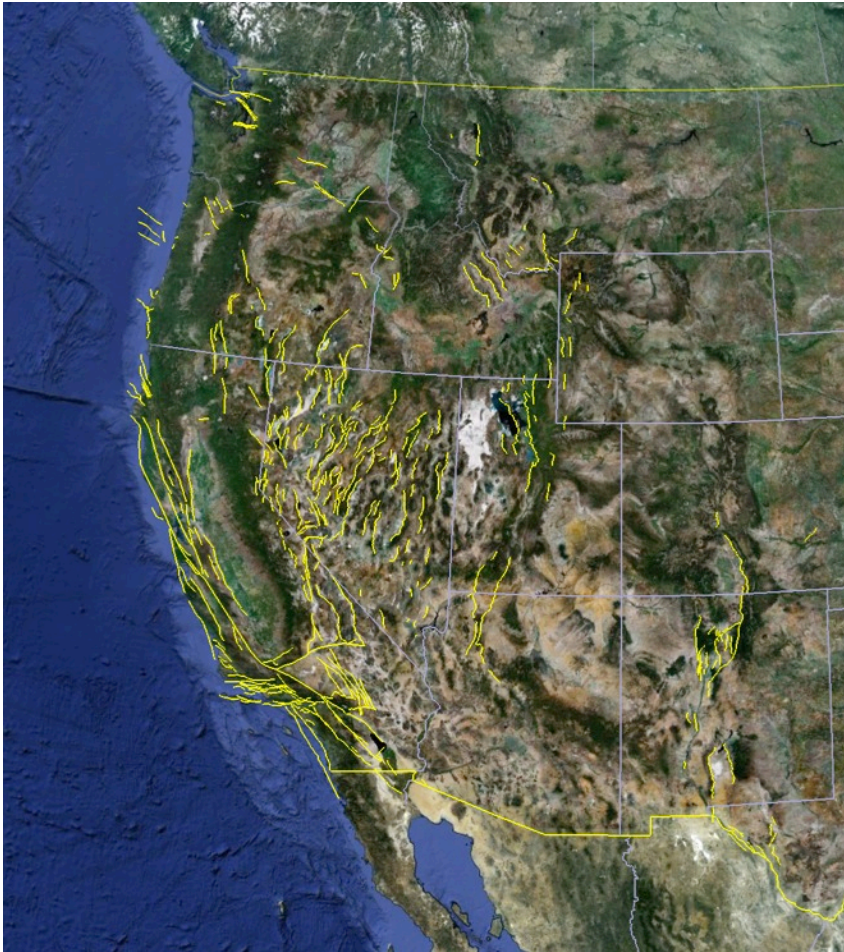|	**Quaternary faults v.1**	**Quaternary faults v.2**	**NSHM sources**
Release date	2001	2012–2013	1996 2008 2002 2014
Content	Compilation of pertinent geologic & paleoseismologic investigations	ditto	Geometric and behavioral parameters assigned to crustal fault sources for PSHA
Spatial accuracy	1:250,000 or 1:100,000	1:250,000 1:100,000 1:50,000 or 1:24,000	1:1,000,000

Quaternary fault database

- > 2,000 faults with reported Quaternary surface deformation
- compilation of paleoseismologic and geologic investigation
- characterization of age of most recent movement, slip rate in broad bins
- location generalized corresponding to mapped scale
- Output Google Earth or GIS
- collaborations

State-lead compilation

State provided technical review

NSHM source model

- about ¼ of the known Quaternary faults are explicit sources
- nearly all of the post late Quaternary faults are represented
- published behavioral parameters including rate data required
- highly generalized source geometry from Quaternary dataset

Questions?