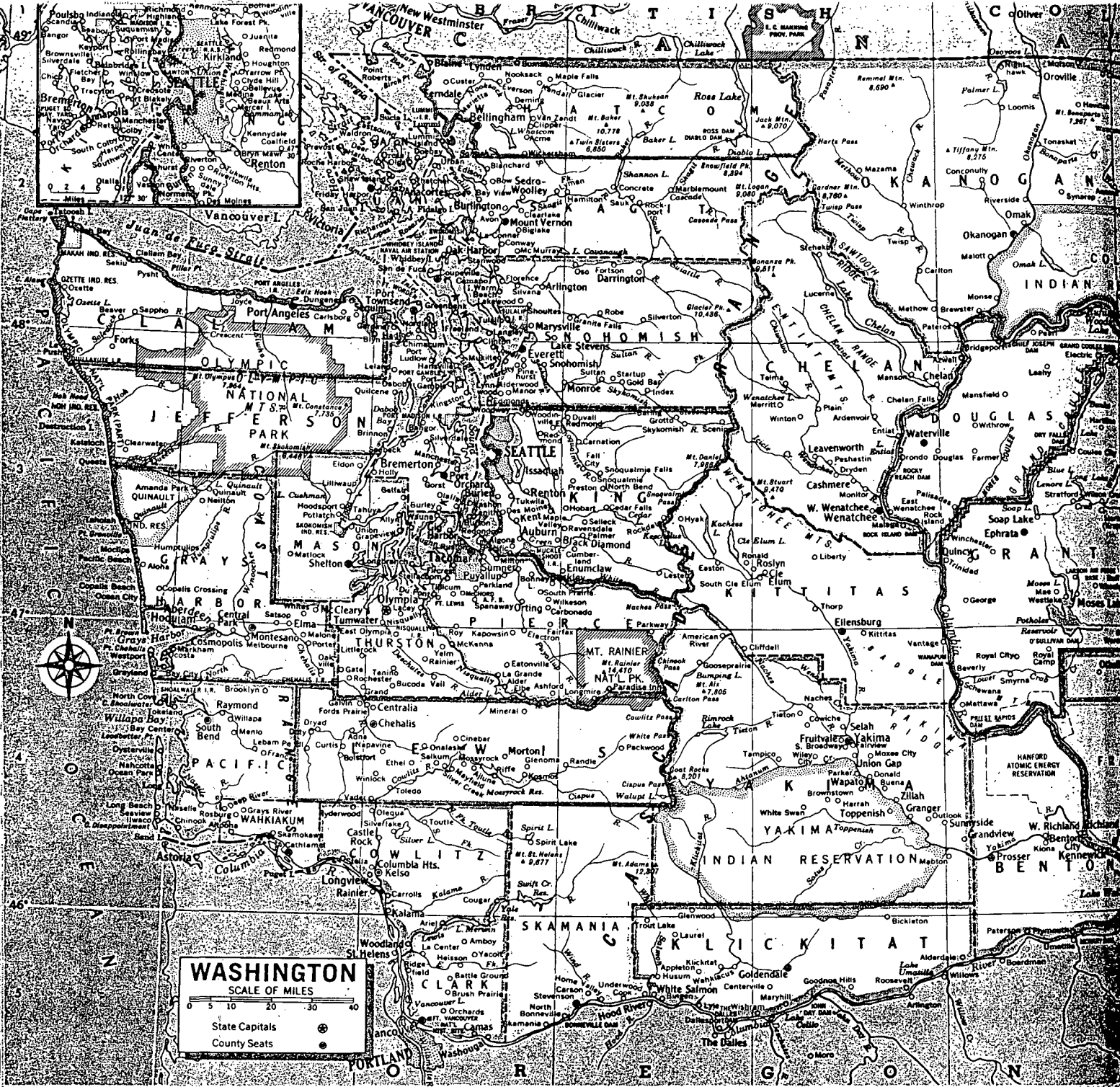


6101841

about 150 miles as crow flies



WASHINGTON
SCALE OF MILES
0 5 10 20 30 40
State Capitals
County Seats

Doty (B4)	250	Espanola (H3)	80	Garfield (H3)	607	Hatton (C4)	65	Kapowsin (C4)	408	Laurel (D5)	84	Malaga (E3)	65	Menlo (B4)	250
Douglas (F3)	10	Ethel (C4)	41	George (F3)	291	Hay (H4)	85	Keller (H3)	29	Malo (G2)	55	Manila (H3)	252	Mercer Island (city)	250
Downs (G3)	10	Eureka (G4)	41	Giffard (G2)	23	Heisson (C5)	28	Kelso (C4)	8,379	Leadpoint (H2)	22	Malone (B4)	200	Mercer Island (town)	12,692
Dryad (A4)	400	Evans (H2)	49	Gig Harbor (C3)	1,094	Hebert (D3)	500	Kenmore (B1)	2,500	Leavenworth (E3)	1,480	Maloit (F2)	350	Mesa (B2)	308
Dryden (E3)	646	Everett (C3)	40,304	Glacier (C3)	431	Home Valley (D5)	188	Kennewick (F4)	14,244	Lebanon (B4)	400	Manchester (A2)	500	Mesa (C4)	253
Du Pont (C3)	354	Ewan (H3)	85	Glenoma (C4)	300	Home Valley (D5)	188	Keyport (A2)	1,200	Leeland (F3)	115	Mesa (C4)	253	Mesa (D4)	103
Dunegness (B2)	490	Fairfax (H3)	40	Glenwood (D4)	610	Hooper (G4)	101	Kent (C3)	5,017	Lester (D3)	150	Manson (E3)	193	Metaline (H2)	299
Dusty (H4)	65	Fairfield (H3)	367	Gold Bar (D3)	315	Hooper (G4)	101	Kent Falls (H2)	905	Liberty (C3)	22	Maple Falls (D2)	100	Metaline Falls (H2)	469
Duvall (D3)	345	Fairview (E4)	2,758	Goldendale (E3)	2,136	Houghton (B2)	10,752	Kewa (G2)	115	Liberty Lake (J3)	650	Maple Valley (C3)	1,800	Milton (E2)	100
East Olympia (C3)	203	Fall City (D3)	143	Goodnow Hills (E5)	214	Houghton (B2)	2,426	Keyport (A2)	536	Lillooet (B3)	50	Marblehead (D2)	566	Milton (E2)	100
East Redmond (C3)	203	Farm (F3)	100	Goose Prairie (D4)	20	Humtup (A3)	200	King (C3)	300	Lincoln (G3)	50	Marcellus (C3)	15	Milan (H3)	81
East Wenatchee (E3)	383	Farmers (H3)	176	Gorst (C3)	40	Hunters (G2)	300	Kiona (F4)	200	Lind (G4)	697	Marcus (H2)	126	Miles (G3)	24
Easton (D3)	250	Farmington (H3)	1,472	Govan (G3)	31	Huntsville (G4)	150	Kirkland (B2)	6,025	Littlerock (B4)	300	Marengo (G3)	45	Millwood (H3)	1,776
Eastonium (B2)	500	Ferdale (C2)	1,442	Grand Coulee (C3)	598	Hunts Point (H3)	428	Kittitas (E4)	536	Long Beach (A4)	665	Marietta (C2)	200	Milton (C3)	2,218
Edson (C2)	856	Fife (C3)	1,463	Grand Mound (C4)	55	Husum (D5)	125	Kittitas (D5)	547	Lillooet (B3)	495	Markham (B4)	50	Mineral (C4)	500
Edmonds (C3)	8,016	Fircrest (C3)	3,565	Grandview (F4)	3,366	Hyak (D3)	30	Kosmos (A4)	750	Longview (B4)	23,349	Marlin (Krupp) (F3)	99	Moclips (A3)	500
Edwall (H3)	150	Fletcher Bay (A2)	150	Granger (E4)	1,424	Iwaco (A4)	518	Krupp (Marlin) (F3)	299	Longview (B4)	23,349	Marshall (H3)	106	Mohler (G3)	37
Elbe (C4)	225	Elbe (C4)	225	Granite Falls (E4)	150	Inchium (G2)	180	La Center (E5)	244	Loomis (F2)	200	Maryhill (E5)	80	Molson (F2)	37
Elberton (H4)	66	Ford (H3)	25	Graysville (C3)	150	Index (D3)	158	La Center (E5)	244	Loomis (F2)	200	Marysville (C2)	3,117	Monday (G3)	150
Eldon (B3)	50	Fords Prairie (B4)	1,404	Grays River (A4)	710	Indiana (A1)	200	La Grande (C4)	100	Lopez (C2)	100	Matlock (B3)	150	Monroe (E3)	200
Electric City (F3)	404	Forks (A3)	1,156	Greenacres (C2)	2,074	Intercity (C3)	1,475	La Push (A3)	300	Lost Creek (H2)	20	Mattawa (F4)	394	Monte (F2)	200
Electron (C4)	96	Fortson (D2)	254	Iron (H2)	648	Iron (H2)	648	Lacey (C3)	6,630	Lowland (G4)	125	Mayfield (C4)	70	Monte (F2)	200
Elk (H2)	13	Four Lakes (H3)	200	Irbay (G3)	25	Issaquah (C4)	1,870	Lacrosse (H4)	463	Lowell (C3)	1,086	Mayview (H4)	10	Montesano (B4)	2,486
Ellensburg (E3)	6,625	Frances (B4)	175	Issaquah (C4)	1,870	Johnson (H4)	200	Lake Forest Park (B1)	1,981	Lucerne (E2)	3	Mazama (E2)	63	Morton (C4)	1,183
Elmer (B4)	1,811	Freeland (C2)	200	Hadlock (C2)	350	Johnston (H4)	200	Lake Stevens (D3)	1,538	Lummi Island (C2)	150	McCleary (B3)	1,115	Moses Lake (F3)	11,299
Elmer City (G2)	265	Freeman (H2)	175	Hamilton (D2)	271	Johnson (H4)	200	Lakeview (C2)	500	Lyle (D5)	475	McKenna (A4)	200	Mossyrock (C4)	344
Elkton (C4)	61	Friday Harbor (B2)	706	Hansville (C3)	150	Lama (G2)	25	Lanona (C3)	25	Lyman (D5)	400	McMurray (C2)	125	Mountlake Terrace (B1)	8,122
Endicott (H4)	369	Fruitland (E2)	78	Harper (A2)	350	Janita (B1)	4,385	Lamont (H3)	111	Lynden (D2)	2,542	Medford (H3)	1,198	Mount Vernon (C2)	7,521
Entiat (C3)	357	Fruita (E4)	3,345	Harrah (E4)	284	Kahlotus (G4)	131	Lancaster (H3)	65	Lynnwood (C3)	7,207	Medical Lake (H3)	4,765	Moxee City (E4)	499
Enumclaw (D3)	3,269	Galvin (B4)	220	Harrington (G3)	575	Kalalook (A3)	24	Langley (C2)	148	Mabton (C4)	958	Medina (B2)	2,285	Mukilteo (C3)	1,128
Ephrata (F3)	6,548	Gardiner (B2)	100	Hartline (F3)	206	Kalama (C4)	1,088	Latah (H3)	490	Mae (F4)	14	Melbourne (B4)	725	Naches (E4)	680



PACIFIC NORTHWEST SECTION
Geothermal Resources Council

On February 24th and 25th, 1987 in Portland, Oregon, the Pacific Northwest Section of the Geothermal Resources Council is sponsoring a technical workshop on the geochemistry and hydrology of Crater Lake.

A hypothesis has been put forth that thermal springs are active on the floor of Crater Lake and that these springs are critical to its limnology. The concern has been expressed that potential geothermal development on the flanks of Mount Mazama could possibly affect these suspected springs and therefore the lake itself. There is currently a moratorium on geothermal leasing until the National Park Service identifies thermal features within the National Park which could potentially be damaged by geothermal development outside of the park boundaries.

A brief window of time (February 15 to March 15) has been provided for public comment to the U.S. Department of the Interior on this issue. To facilitate informed comment and to increase understanding of the issue by all parties involved, a technical workshop is being convened. The workshop is intended to provide a forum for evaluation and discussion of relevant research and its implications. The convening of this workshop has received encouraging support from numerous interested parties including the Bureau of Land Management, the National Park Service, the U.S. Forest Service, the U.S. Geological Survey, the U.S. Department of Energy.

Scientists who have conducted relevant research on Crater Lake are invited to give informal presentations of their work and entertain discussion. We would appreciate researchers presenting work providing a n extended abstract or written summary. In addition to those who have conducted research, the workshop is open to any persons interested in this issue, or who wish to become involved in technical discussions. Policy makers and environmental organizations involved in this issue are particularly encouraged to participate.

Some of the pertinent questions to be addressed include:

What lines of evidence support the existence of thermal springs in Crater Lake? Is any of the evidence conclusive?

Are active hot springs the only possible explanation for the anomalous chemistry of Crater Lake? Has the chemical evolution of the lake been adequately modeled?

What is known about the hydrogeology of the Crater Lake area? What is the nature of the local and regional ground water systems around the lake. Given the above, what is a reasonable model for a hydrothermal systems. Under what hydrogeologic conditions would thermal springs be able to discharge from the floor of the lake? Are such springs likely to be in direct hydraulic communication with any hydrothermal systems outside the park?

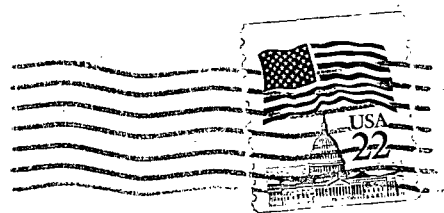
If thermal springs do exist in Crater Lake, what would be their anticipated effect on the limnology, optical properties and hydrology of the lake. What are the mechanisms by which any effects occur? Would such springs influence any possible convection in the lake?

The Workshop will be held February 24th and 25th at the Marriott Hotel in downtown Portland. The Price of the workshop is \$20.00, which will include lunch the first day.

If you would like to present your research or just attend, please contact Al Waibel, Columbia Geoscience, 22495 N.W. Quatama Rd. Hillsboro, OR 97124 (503) 640-9877

We would like to express our appreciation to those key researchers and agencies who have indicated an intent to participate.

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