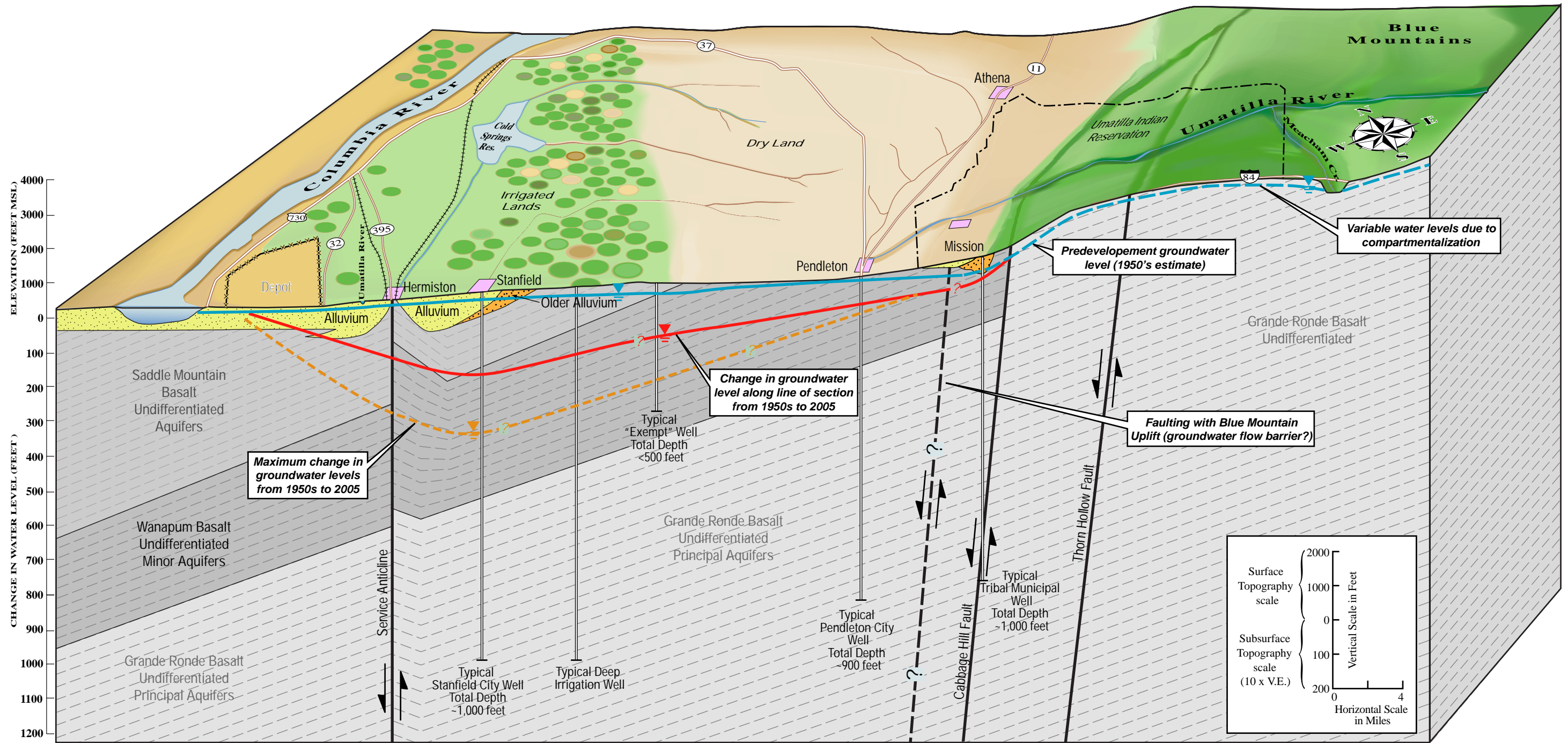


NORTHWEST

SOUTHEAST



ELEVATION (FEET MSL)

CHANGE IN WATER LEVEL (FEET)

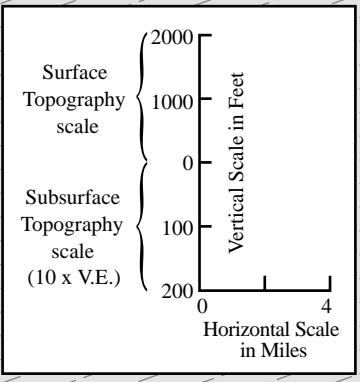
Maximum change in groundwater levels from 1950s to 2005

Change in groundwater level along line of section from 1950s to 2005

Predevelopment groundwater level (1950's estimate)

Variable water levels due to compartmentalization

Faulting with Blue Mountain Uplift (groundwater flow barrier?)



Ordnance Critical Groundwater Area (CGWA)

Butter Creek CGWA

Stage Gulch Critical Groundwater Area

Saddle Mountain Basalt Undifferentiated Aquifers

Wanapum Basalt Undifferentiated Minor Aquifers

Grande Ronde Basalt Undifferentiated Principal Aquifers

Grande Ronde Basalt Undifferentiated Principal Aquifers

Grande Ronde Basalt Undifferentiated

Blue Mountains

Columbia River

Umatilla River

Athena

Pendleton

Mission

Hermiston

Stanfield

Older Alluvium

Alluvium

Depot

Cold Springs Res.

Dry Land

Umatilla Indian Reservation

Meacham Cr.

730

32

395

37

11

84



Service Anticline

Cabbage Hill Fault

Thorn Hollow Fault

Typical Stanfield City Well Total Depth ~1,000 feet

Typical Deep Irrigation Well

Typical "Exempt" Well Total Depth <500 feet

Typical Pendleton City Well Total Depth ~900 feet

Typical Tribal Municipal Well Total Depth ~1,000 feet