

CITY OF OREGON CITY

# MASTER

NEWELL CREEK CANYON



# PLAN

OCTOBER 28, 2014

COMMUNITY EVENT #2



MAKING A GREAT PLACE  
Metro

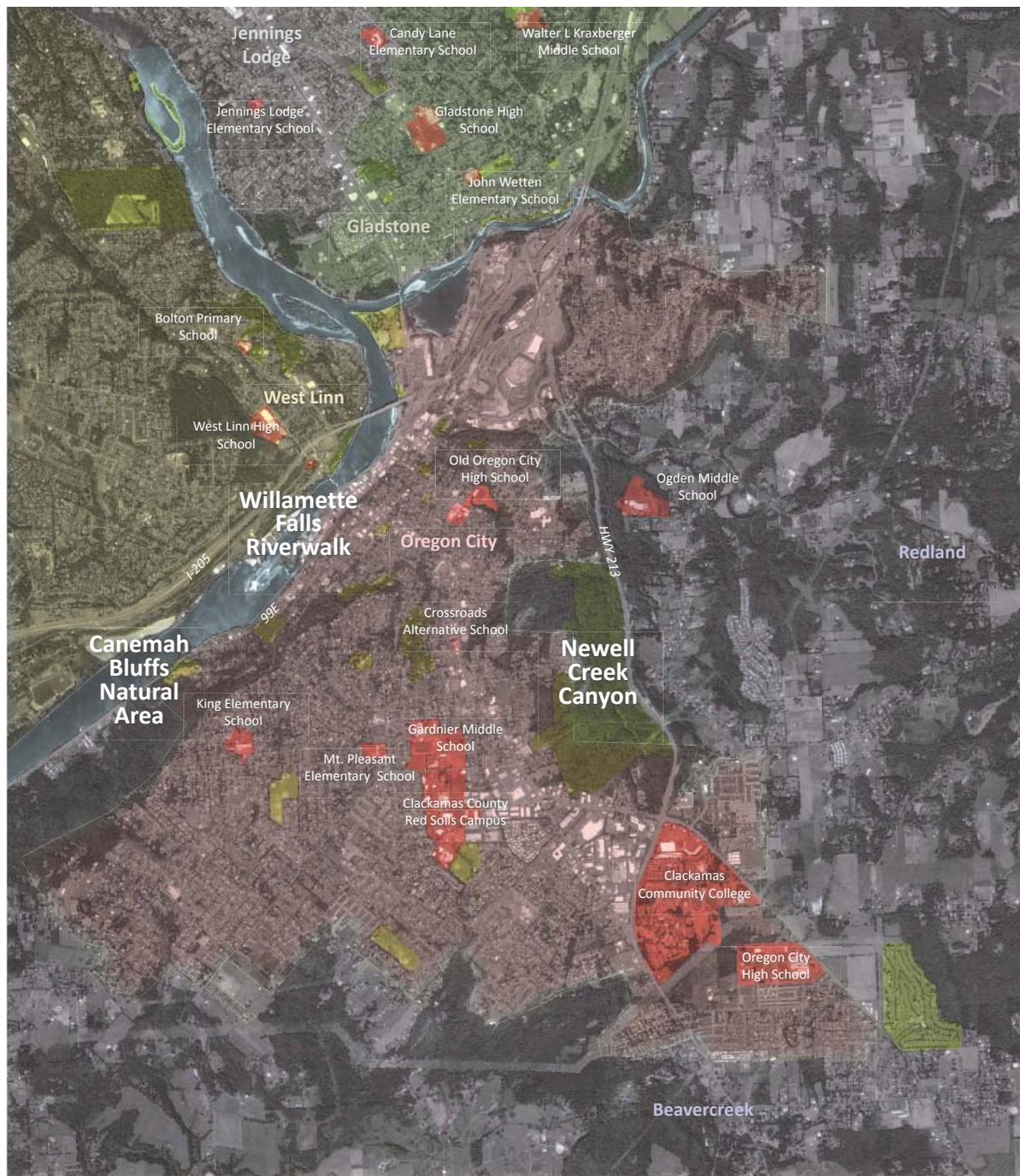
# NEWELL CREEK CANYON COMMUNITY FEEDBACK





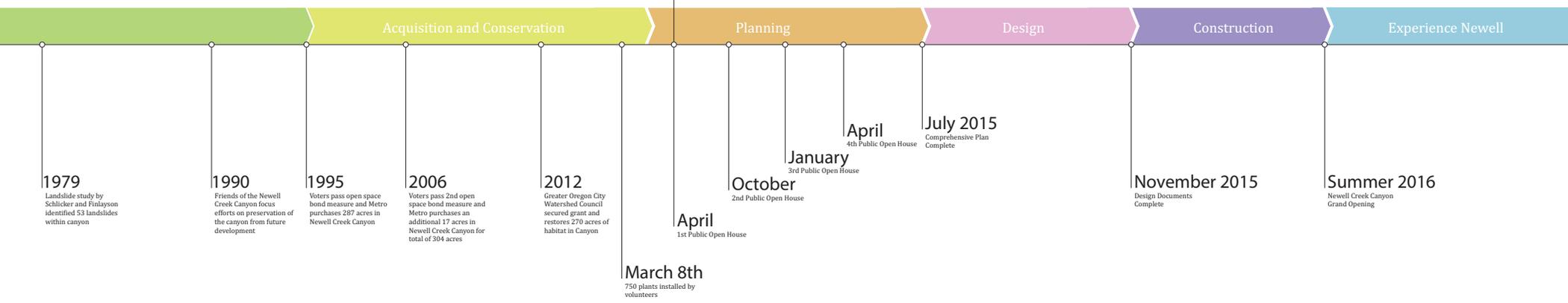






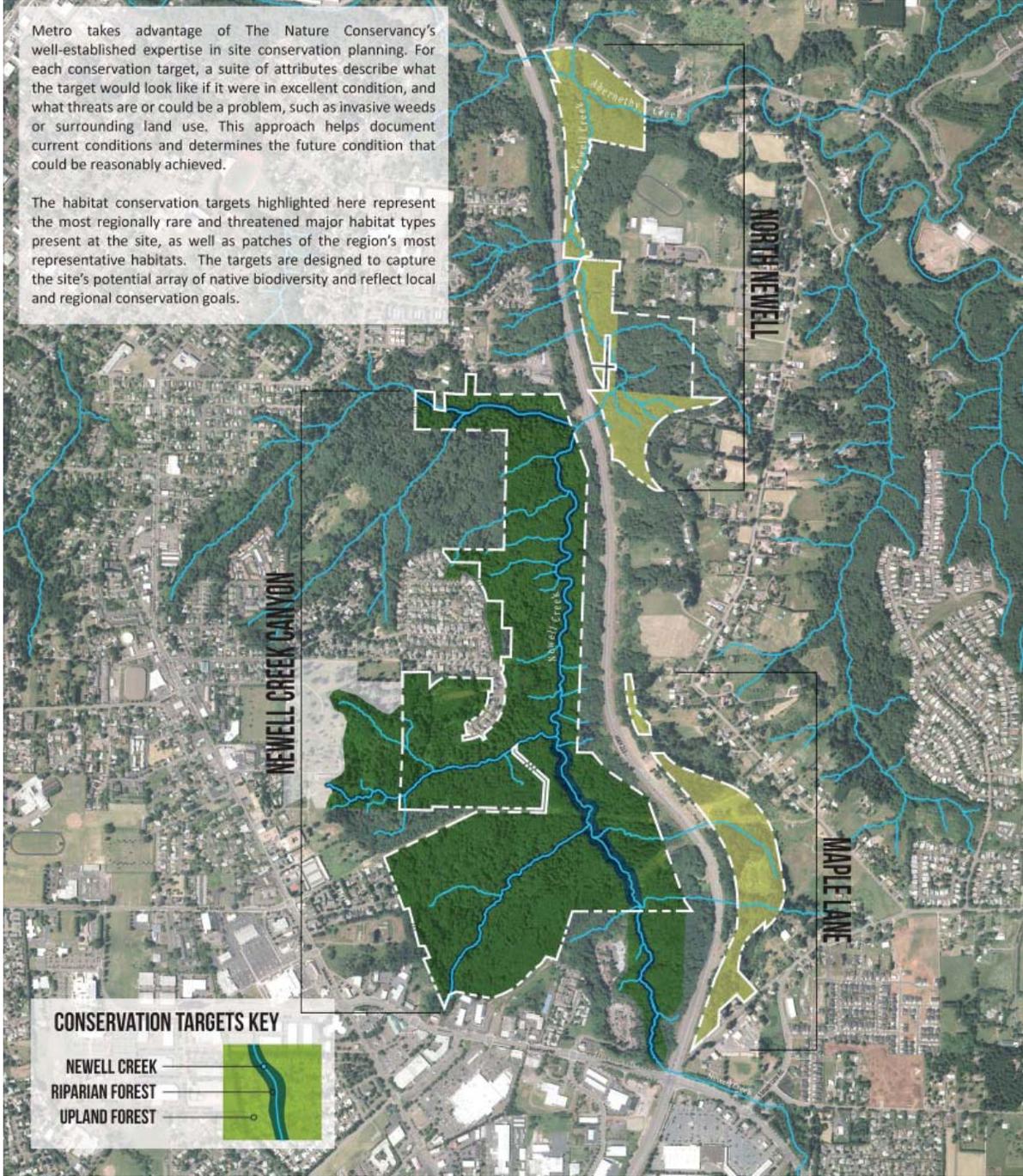
# time·line ('tīm, līn)

a graphic representation of the passage of time as a line



Metro takes advantage of The Nature Conservancy's well-established expertise in site conservation planning. For each conservation target, a suite of attributes describe what the target would look like if it were in excellent condition, and what threats are or could be a problem, such as invasive weeds or surrounding land use. This approach helps document current conditions and determines the future condition that could be reasonably achieved.

The habitat conservation targets highlighted here represent the most regionally rare and threatened major habitat types present at the site, as well as patches of the region's most representative habitats. The targets are designed to capture the site's potential array of native biodiversity and reflect local and regional conservation goals.



## KEY HABITATS WITHIN THE CONSERVATION TARGET:

Newell Creek

Upland Forest

Riparian Forest



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# ACQUISITION

Metro

## GEOLOGY (jē-ōl'ə-jē)

The scientific study of the origin, history, and structure of the earth.

## SCARP (skärp)

a steep slope, especially one formed by erosion or faulting

## LANDSLIDE (länd'slīd')

the falling or sliding of a mass of soil or rock on or from a steep slope.

### BORING LAVAS

The Boring Lavas are basaltic lavas that overlie the Sandy River Mudstone and Troutdale Formation. These Lavas are Pliocene-Pleistocene age basalts that are light gray in color and vary in thickness from 8 to over 150 meters. They occur as blocky intracanyon flows, volcanic cones, and shield volcanoes, which result in deposits ranging from tuff breccias and agglomerates to lavas (Schlicker and Finlayson, 1979). Where the flows are thin they are sometimes weathered to a red clay with scattered residual boulders (Schlicker and Finlayson, 1979). Weathering of the Boring Lavas produces a 0.3 to 3 meter thick impermeable clay-rich soil over the bedrock which saturates quickly and forms ponds or heavy runoff through riviulets.

### TROUTDALE FORMATION (Upper and Lower)

Troutdale Formation is a fluvial deposit that is currently divided into two distinct lithologies: the upper and lower members. The lower member consists of paleo-Columbia River gravels and sands composed mainly of basaltic pebbles and cobbles and minor amounts of intrusive granite and metamorphic rock types of which quartzite is usually noted. These gravels will stand vertically for several tens of meters and are highly permeable. In addition to some gravels, the upper member largely consists of finer grained sands, silts, and clays that are generally locally derived volcanic debris, altered to a clay, agglomerates and highly weathered basaltic gravels. The upper member, like the Sandy River Mudstone, also contains impermeable clay layers that are moisture sensitive.

### SANDY RIVER MUDSTONE

Sandy River Mudstone consists of mudstone, siltstone, and fine to medium grained sand with some gravel lenses ranging in thickness of individual beds from 0.6 to 4.5 meters. This formation is currently thought to be the same as the lower Troutdale Formation and represents the fine-grained, overbank facies of the ancestral Columbia River. The fine grained facies tends to be an impermeable barrier to groundwater causing local high water tables and springs if they intercept the surface. Moisture-sensitive clays, present in certain parts of the Sandy River Mudstone, expand with increasing moisture, decreasing its shear strength, and contract when drying (Schlicker and Finlayson, 1979).

### COLUMBIA RIVER BASALT

The Columbia River basalt is a series of lava flows or flood basalts ranging in thickness from 5 to 45 meters, with a total thickness of about 300 meters. Thin, baked soil zones often separate the individual flows. Prior to the deposition of younger formations on top of the Columbia River basalt, the Columbia River Basalt Group was gently folded and faulted resulting in topographic highs and lows. In some of these topographic lows, such as Newell Creek Canyon, thick sedimentary units have been deposited on top of the Columbia River basalt, filling in the depression.

### SAG POND (sag pänd)

body of water collected in the lowest parts of a depression formed near the head scarp of rotational landslides

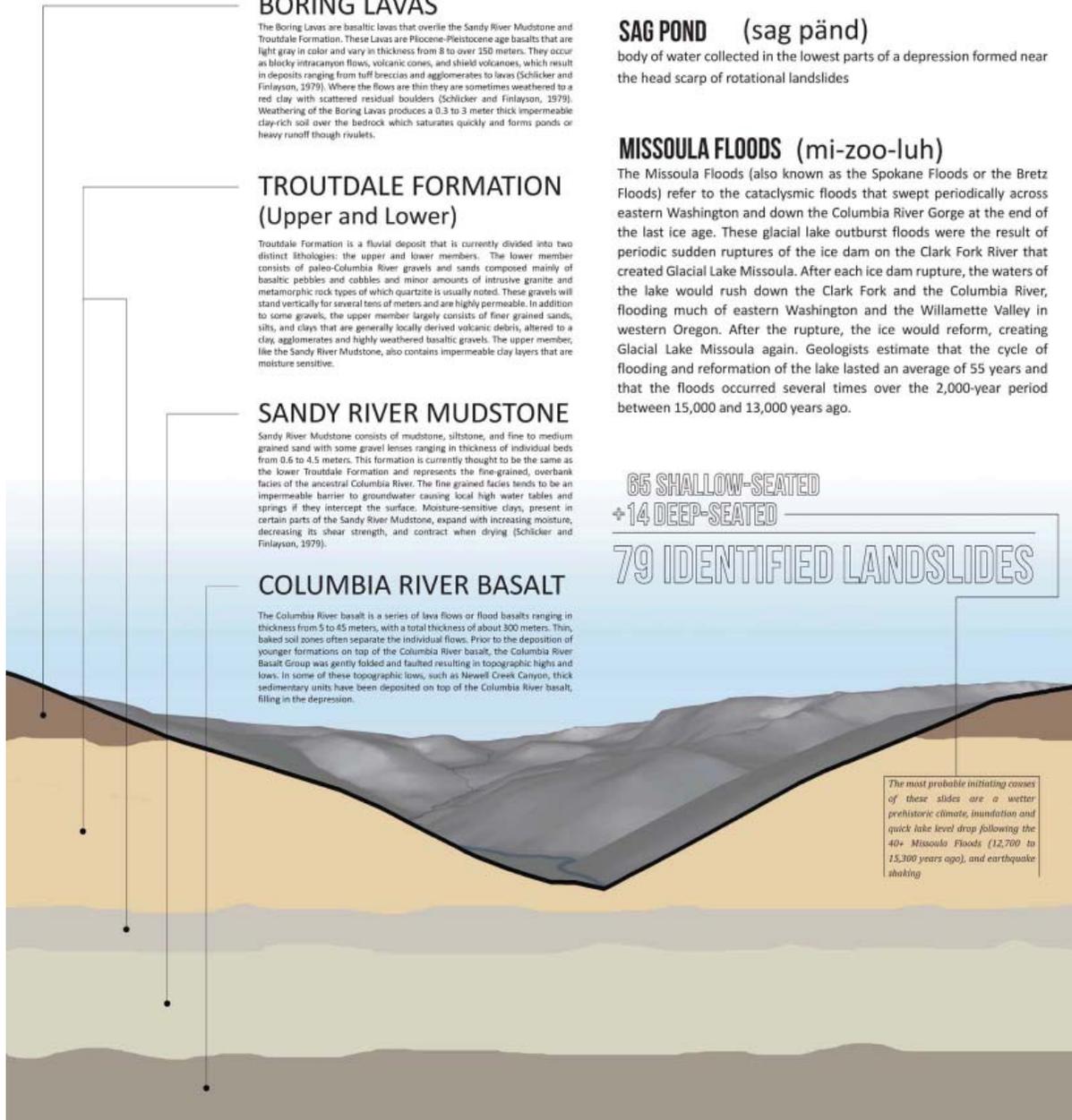
### MISSOULA FLOODS (mi-zoo-luh)

The Missoula Floods (also known as the Spokane Floods or the Bretz Floods) refer to the cataclysmic floods that swept periodically across eastern Washington and down the Columbia River Gorge at the end of the last ice age. These glacial lake outburst floods were the result of periodic sudden ruptures of the ice dam on the Clark Fork River that created Glacial Lake Missoula. After each ice dam rupture, the waters of the lake would rush down the Clark Fork and the Columbia River, flooding much of eastern Washington and the Willamette Valley in western Oregon. After the rupture, the ice would reform, creating Glacial Lake Missoula again. Geologists estimate that the cycle of flooding and reformation of the lake lasted an average of 55 years and that the floods occurred several times over the 2,000-year period between 15,000 and 13,000 years ago.

65 SHALLOW-SEATED  
+ 14 DEEP-SEATED

79 IDENTIFIED LANDSLIDES

The most probable initiating causes of these slides are a wetter prehistoric climate, inundation and quick lake level drop following the 40+ Missoula Floods (12,700 to 15,300 years ago), and earthquake shaking





LAYERS OF INFORMATION CONSIDERED:

Natural Resources

Geology

Access: Community, Maintenance, Security

IMBA Study

Community Feedback from last event

Land Management





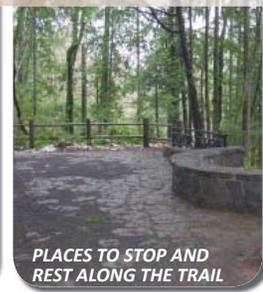
## GATHERING



A DEFINED ARRIVAL/ORIENTATION KIOSK AND OPEN SPACE FOR GATHERING AND EVENTS



A DEFINED OVERLOOK



PLACES TO STOP AND REST ALONG THE TRAIL



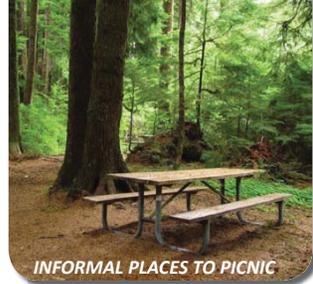
## PICNICKING



LARGE-SCALE PICNIC SHELTER THAT RELATES TO THE SURROUNDING ENVIRONMENT



PICNIC STRUCTURES FOR SMALLER GROUPS



INFORMAL PLACES TO PICNIC



## PLAYING



BALANCING



CLIMBING



EXPLORING



## LEARNING ABOUT PLACE



1% FOR ART PROGRAM



1% FOR ART PROGRAM



### MOUNTAIN BIKING



MOUNTAIN BIKING ON SOFT-SURFACE TRAILS



### GEOCACHING



BUILDING OUTDOOR SKILLS



### CONSERVATION EDUCATION



NW TRACKERS CAMPS AND OUTDOOR PROGRAMS



### HIKING/TRAIL RUNNING



ACCESSIBLE MULTI-USE TRAILS (ASPHALT OR CONCRETE)



ACCESSIBLE MULTI-USE TRAILS (CRUSHED GRAVEL)



SOFT-SURFACE HIKING TRAILS



### SCENIC VIEWING



SUSPENSION BRIDGE VIEWPOINT



CANOPY WALK



SAG POND RIM TRAIL



### WILDLIFE VIEWING



WILDLIFE VIEWING BLIND



### LEARNING ABOUT PLACE



LEARNING ABOUT PLACE THROUGH GEOLOGY



## VOLUNTEERING



CLEANUP GROUPS



MAINTENANCE



REMOVAL OF INVASIVE SPECIES



COLLECTING NATIVE SEED



RESTORATION PLANTING



## CONSERVATION EDUCATION



EDUCATIONAL NATURE WALKS FOR BIRDING/  
WILDLIFE



NW TRACKERS CAMPS AND OUTDOOR  
PROGRAMS



EDUCATIONAL CLASSES ON  
GEOLOGY



EDUCATIONAL CLASSES ON WILDLIFE

 GREEN = YES!

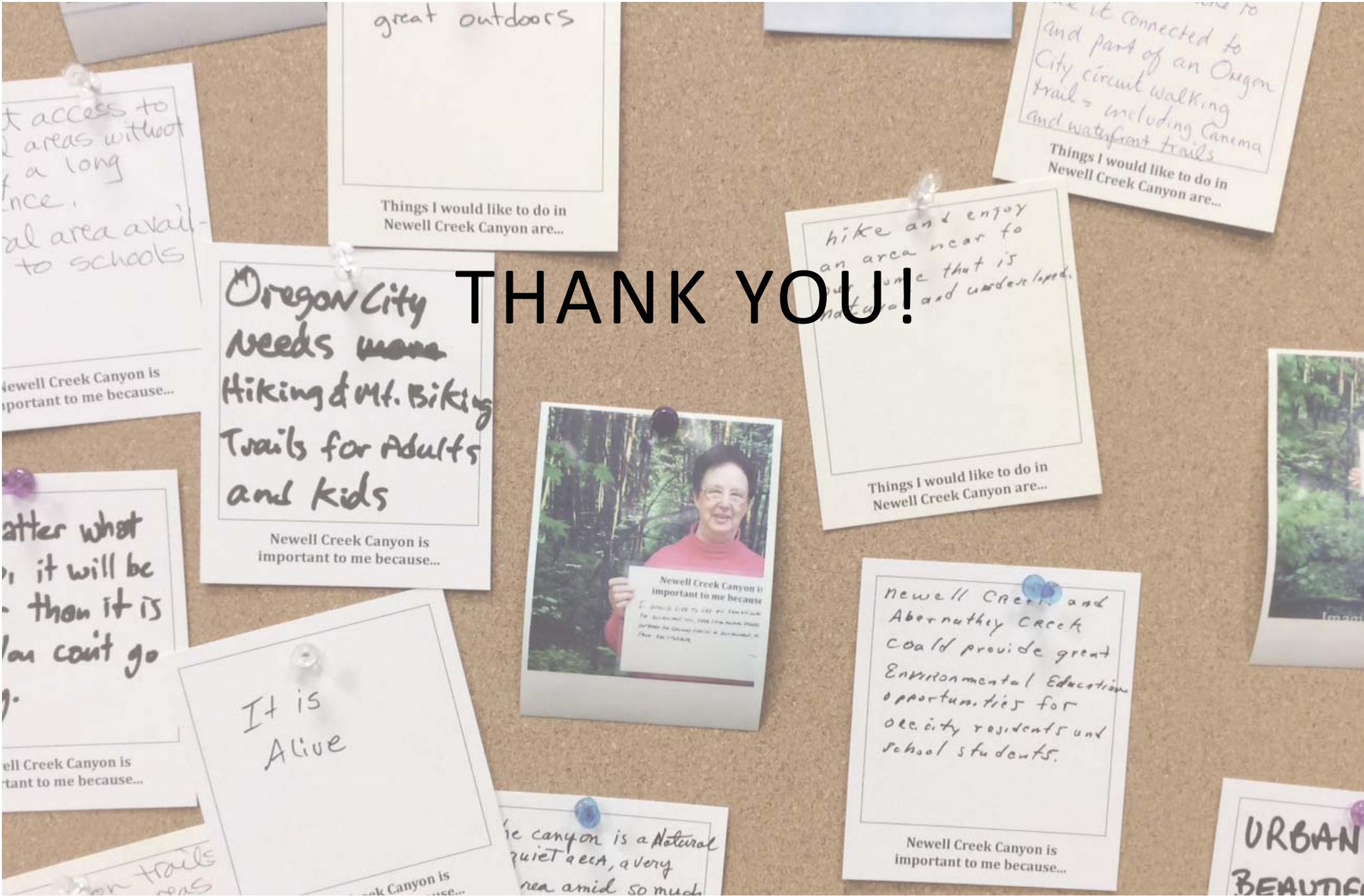
 RED = NO



What else would you like to see in  
Newell Canyon...



Next Meeting: January-February  
Presentation of Draft Alternatives



THANK YOU!

great outdoors

Things I would like to do in Newell Creek Canyon are...

...it connected to and part of an Oregon City circuit walking trail = including Canema and waterfront trails

Things I would like to do in Newell Creek Canyon are...

hike and enjoy an area near to ... that is natural and undeveloped.

Things I would like to do in Newell Creek Canyon are...

Oregon City Needs more Hiking & Mt. Biking Trails for Adults and Kids

Newell Creek Canyon is important to me because...



Newell Creek and Abernathy Creek could provide great Environmental Education opportunities for community residents and school students.

Newell Creek Canyon is important to me because...

It is Alive

...canyon is a Natural quiet area, a very nice area amid so much

URBAN BEAUTIFUL

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