



# Oregon

Theodore R. Kulongoski, Governor

Department of Environmental Quality

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November 2, 2007

Governor Theodore Kulongoski  
160 State Capitol  
900 Court Street NE  
Salem, OR 97301-4047

Dear Governor Kulongoski:

Thank you for your letter regarding the Metolius River Basin, and potential impacts of local development on water quality. As your letter made clear, the Metolius River is an unparalleled natural feature of Oregon's Cascade Mountains, worthy of the best protection available. You requested an assessment of the adequacy of existing state regulations to specifically protect water quality in the Metolius River.

The Metolius River rises from springs fed by snowmelt filtering through porous volcanic rock. Water in the river today fell as snow in the cascades many years ago. This process results in some of the clearest, coldest, and purest surface waters in the state. In the upper Metolius River Basin, water is fairly close to the surface, and is somewhat more vulnerable to human activity or development than areas to the north and east, where ground water lies much farther below the surface. Although there have been proposals for developments already, I am addressing the issue of environmental protection in the basin in a more general sense, rather than any specific development.

The Department of Environmental Quality (DEQ) has authorities to protect the benefits that air and water provide to people and the environment. Specifically, the water quality authorities that apply in the Metolius River Basin include anti-degradation rules, wastewater treatment including onsite and septic systems, controlling stormwater from construction activities, post-construction stormwater controls, and total maximum daily loads (TMDLs).

Large destination resort developments are densely constructed communities requiring collection, treatment and disposal of domestic wastewater and stormwater. During development, construction activities have the potential to deliver sediments and associated pollutants to flowing waters. In a community the size of a destination resort, stormwater runoff from roofs, streets, and some types of irrigated land, must be managed to minimize environmental impacts. DEQ has varying degrees of regulatory control over these sources of pollutants, and little to no authority over water use that may diminish flows in streams. Reduced flows may subsequently reduce water quality.

Anti-degradation rules: Water quality standards are designed to ensure that basic uses of water are available now and are protected from degradation in the future. Such uses include drinking,



fishing and contact recreation. The water quality standards do not necessarily ensure there is no degradation, only that degradation will not hamper or eliminate the use. In general, I believe that our rules are protective of human health and the environment to ensure that the beneficial uses are protected, though there are some gaps in stormwater regulation that are relevant to increased development in the Metolius River Basin, as described below.

Wastewater treatment, including septic systems: The treatment of wastewater is tightly regulated but there will be constituents, such as nutrients, that are still released to the environment. There is little likelihood that a development would be allowed to discharge treated wastewater directly to the Metolius River or a tributary because of existing water quality problems, and because developments outside urban growth boundaries are subject to restrictions on wastewater under land use laws. Subsurface discharge to shallow soils or land application to the surface of soils may be allowed. Even with substantial removal of nutrients and other constituents from this wastewater prior to discharge, small amounts of nutrients may reach the Metolius River or its tributaries through runoff or seepage to groundwater that flows into the Metolius. The river is sensitive to nutrients, and small increases in nutrients could result in some degradation of water quality, such as decreased dissolved oxygen, increased aquatic plant growth, and changes in pH, among others. These effects would be more significant in the western part of the basin, where the relative depth to groundwater is shallower than east of Green Ridge.

Stormwater impacts from construction activities: Construction activities that disturb the land surface are regulated through construction stormwater permits. These permits require use of practices and control technologies to keep sediments out of stormwater, but do not always result in complete control.

Post-construction stormwater control: In general, DEQ does not have a regulatory framework for controlling stormwater from these developments once they are constructed. Local governments may exercise control or, in some cases, DEQ's Underground Injection Control rules may apply to stormwater. If wetlands are impacted, there DEQ and DSL regulations would apply.

Total Maximum Daily Load: You also asked that we consider the potential effects of these types of developments as we complete a Total Maximum Daily Load (TMDL) for this area. DEQ considers both current development and potential growth as best we can during TMDL studies. It is very difficult to estimate the potential effects of wastewater and stormwater in basins where the developments have not been proposed, but are likely to occur. The majority of pollutant discharges in the Metolius River Basin will be from nonpoint sources, which, like stormwater have less stringent regulatory control. Likely authorities from the TMDLs may include stricter wastewater discharge requirements and additional stormwater controls for existing and proposed developments, depending on the outcomes of the TMDLs.

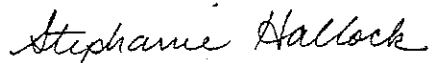
The Deschutes Basin TMDLs that will include the Metolius River Basin are currently on hold. The Water Quality Program reprioritized its schedule over the last two years in light of resource constraints, and the need to complete work in other priority basins, such as the Willamette, Umpqua, Rogue and John Day. As you've requested, we will give the Metolius River special consideration when we return to work on the Deschutes Basin TMDLs. Though we have

collected a considerable amount of data in the Deschutes Basin, we do not anticipate returning to work on these TMDLs in this biennium.

In summary, DEQ has considerable authority over the discharge of pollutants to waters of the state. Despite this, there are significant sources of pollutants that are comparatively uncontrolled, and the potential effects of these discharges, along with potential decreases in instream flow from development could have a measurable impact on an outstanding water such as the Metolius River. Because DEQ does not have a regulatory framework for stormwater management after construction, we believe these developments could pose a significant risk to water quality. The level of risk is dependent on the size and proposed location within the Metolius River Basin.

If there is anything contained in this letter you have questions about, or if you'd like additional information about this or any other aspects of the Metolius River Basin, please call me.

Sincerely,

A handwritten signature in cursive script that reads "Stephanie Hallock".

Stephanie Hallock  
Director

cc: Mike Carrier, GNRO  
Tim Nesbitt, Governor's Office  
Dick Pedersen, DEQ