

RIGHTS OF NATURE

ASSIGNING RIGHTS TO THE BOULDER CREEK WATERSHED

STEP2

Enact Ordinaces to recognize the rights of the land and ecosystem





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SUPPORTING COUNSEL

RIGHTS OF NATURE: DEFINED

Rights of Nature is an ethical framework that recognizes Nature's right to exist, thrive and evolve – enabling Nature to defend these rights in court, just like humans and corporations can. Rights of Nature also recognizes that humans and Nature are co-members of a larger Earth Community, whose overarching well-being must be paramount.

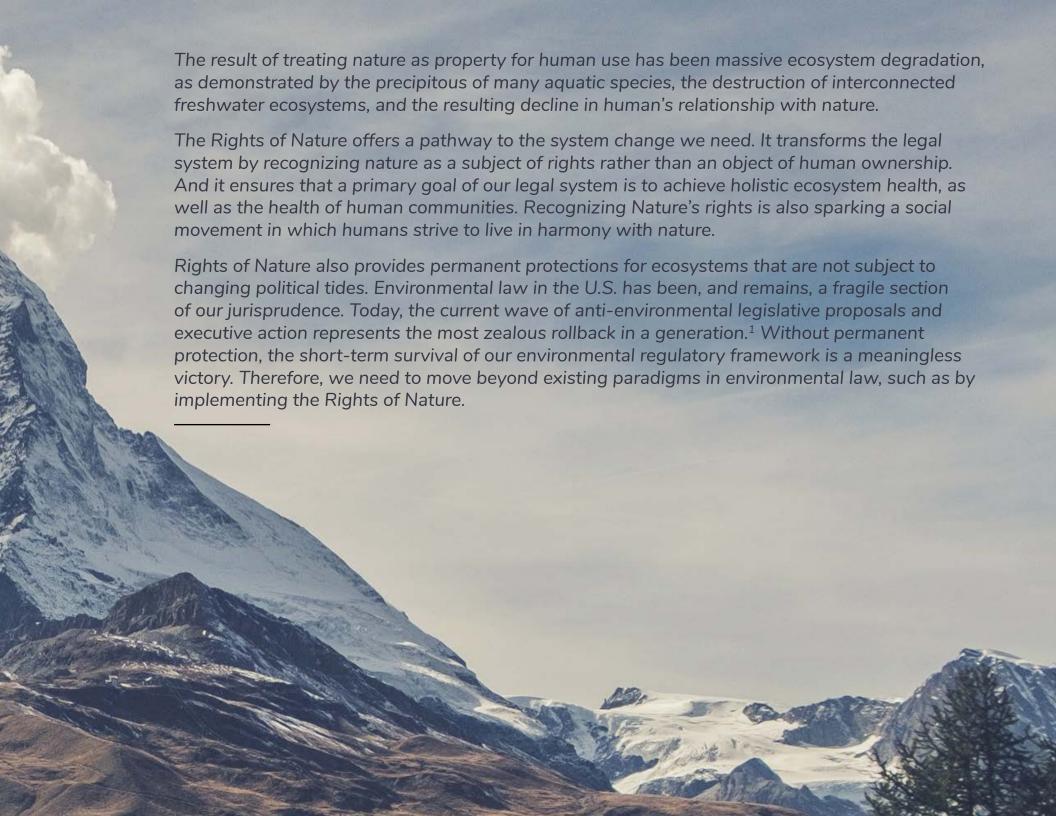
The Rights of Nature movement embodies the principle that natural communities and species are not merely property to be owned. Instead, they are living entities with certain inalienable and inherent legal rights.

WHY RIGHTS OF NATURE?

Why, despite the passage of numerous environmental laws at the state and federal level, do our ecosystems continue to decline? The underlying reason is that the dominant way humans interact with the environment is to place a value on water, land, forests, wildlife, and so forth, that is tied to the benefit gained by extracting and controlling these entities. The U.S. legal system is grounded in the view that the environment is human economic property, rather than a rights-bearing entity of its own.

"The river as plaintiff speaks for the ecological unit of life that is part of it."

~Justic William O. Douglas Sierra Club v. Morton 1972



Why Rights for the Watershed?

The rights of rivers and other waterways, as well as their watersheds, have been a focal point of the global Rights of Nature movement (see below). Recognizing the rights of waterways, as well as watersheds, has many potential benefits. Under this approach, the damage caused by historic water overuse, pollution, and dam-building must be repaired as a right. Additionally, laws and policies will have to be reimagined such that they achieve the overarching health of watersheds, as opposed to the legal system's current approach of merely seeking "less pollution." And more broadly, a rightsbased approac creates a new cultural of humans and nature living together in harmony.

A Brief History

Rights of Nature is not a new or revolutionary idea. Following the worldview held by many indigenous nations for millennia, Rights of Nature lawyers draw on the precedent and expertise developed in the practice of human rights, civil rights, women's rights, and animal rights. Rights of Nature, in the context of our modern legal system, were first proposed by Christopher Stone in his 1972 article, "Should Trees Have Standing?". In the same year, Supreme Court Justice William O. Douglas argued (in Sierra Club v Morton) that trees, valleys, rivers, lakes, etc. should be granted personhood and have the ability to sue for their own protection.

After laying relatively dormant for decades, the movement gained new momentum when Ecuador recognized Rights of Nature in its 2008 Constitution. Since then, dozens of governments and courts throughout the world have recognized Nature's rights in order to restore balance to our relationship with ecosystems before it's too late.

DOMESTIC AND INTERNATIONAL PROGRESS

Rights of Nature in PracticeAt the Municipal Level

Consider the following central elements:

- Recognition of the Rights of Nature promotes the growth and evolution of the community's relationship with Nature, adding a legal dimension that reflects our cultural, spiritual, and participatory connection to Nature.
- Rights of Nature, rather than merely establish thresholds for allowable environmental damage like our current environmental laws, holistically considers what natural ecosystems need to regain and maintain health.
- Including Nature as a right-bearing entity means seeing humanity and Nature as interconnected and recognizing that our survival depends on healthy ecosystems and environments.

Dozens of local communities around the world – effected by varying environmental concerns and government structures - have recognized the Rights of Nature in differing legal forms and approaches. In the United States, many efforts to establish Rights of Nature in law have occurred locally rather than at the state or federal level, primarily because local legislative bodies are typically more accessible and responsive to public input than state and federal government bodies.

To learn more about the local Rights of Nature movement, read Earth Law Center's "Community Toolkit for the Rights of Nature," available at www.earthlawcenter.org.

At the International Level

With the passage of the Te Awa Tupua Bill (Whanganui River Claims Settlement) in 2017, the Whanganui River, the largest navigable river in New Zealand, became the first water system in the world to be recognized as a rights-bearing entity holding legal 'personhood' status. Through incorporating traditional indigenous beliefs towards Nature in modern New Zealand law, the New Zealand Parliament adopted a "guardianship method" towards the river, meaning the Whanganui River is now represented by two Maori guardians of the Whanganui Tribe.

This treaty is especially important because it "recognises the intrinsic interconnection between the Whanganui River and the people of the River (both iwi and the community generally)," and finds "the health and wellbeing of the Whanganui River is intrinsically interconnected with the health and wellbeing of the people." Although New Zealand has not formally adopted the Rights of Nature into statutory or constitutional law, the nation has acknowledged the inherent rights of nature by granting legal personhood to selected rivers, lands (Te Urewera), and mountains (Mt. Taranaki).

Elsewhere in the world, countries have similarly recognized the intrinsic Rights of Nature in a variety of ways. Showing the highest form of legal protection towards Nature are Ecuador and Bolivia, who have included the Rights of Nature in their federal constitutions. Colombia has granted the Rio Atrato and its portion of the Amazon legal standing, Mexico City recognized the Rights of Nature in its city constitution, and communities in Argentina and Brazil have similarly passed municipal ordinances recognizing the Rights of Nature.

For a working list of Rights of Nature laws around the world, visit http://arcg.is/Ojj8m.



Legal Significance

The Rights of Nature movement, which is rectifying our flawed legal and economic systems, is taking hold throughout the world. In light of this, Boulder, Colorado has the exciting opportunity to join – and to lead – this emerging movement. With Boulder's long history of cutting-edge environmental protections, this new legal paradigm would strengthen these protections and serve as a model for other U.S. communities.

Boulder Rights of Nature (BRON) has partnered with the Earth Law Center and other local groups to establish the Boulder Creek Watershed as a legal entity possessing rights.

Addressing the challenges (as discussed below) faced by the watershed, a local Rights of Nature law would permanently protect the Boulder Creek Watershed by establishing its fundamental rights, including a legal right to flow, to be free from pollution, to restoration, and others. Similar to the Whanganui River discussed above, the Boulder Creek Watershed would be appointed legal guardians to represent and enforce these rights.

Ordinances versus Resolutions

A municipal ordinance is a rule, law or statute adopted by a municipal legislative body, whereas a resolution is a formal expression of the opinion or will of an official municipal body adopted by a vote. A municipal ordinance generally means that a municipal act is adopted with the force and effect of a law, the violation of which may be enforced in city municipal court. A resolution, however, may be a statement of policy by the municipal governing body or an order of the municipal governing body that a specific action be taken.²

Both forms of law and policymaking are present in recent municipal initiatives recognizing Rights of Nature, but we in Boulder hope to start with a resolution and work our way up to an ordinance.

^{2 &}quot;Legal Opinion." City Attorney's Office of Missoula, MT, www.ftp.ci.missoula.mt.us/documents/attorney/opinions/062002.pdf.

Legal Considerations

Since this is an innovative legal movement that seeks to evolve our legal system's treatment of Nature under the law, Rights of Nature laws should be drafted carefully to ensure they are clear, credible, and legally-defensible. Successful case studies and legal counsel (some of which can be found online in the Earth Law Center's 2019 Community Toolkit for Rights of Nature) are beneficial in navigating the best path forward, as well as understanding some of the key legal considerations.

Municipalities like Santa Monica have taken this approach to passing Rights of Nature laws. Their goal was to create a new blueprint of municipal environmental protections based around the concept of Rights of Nature, and they worked with Earth Law Center and other groups to ensure the laws were both progressive and legally defensible.

THE BOULDER CREEK WATERSHED

What is a Watershed?

A watershed is a geographic area in which water flows across the land and drains into a common outlet – such as a stream, river, lake, or ocean. Its area is defined by the continuous ridgelines that form its boundaries.³ If you place a drop of water anywhere within a watershed, it will follow gravity downhill towards the same main body of water. A watershed includes all waterways, groundwater, land, and ecosystems therein, and forms the basis for plant, animal, and human communities.

Watershed Management." Water Quality Monitoring Efforts, dep.wv.gov/WWE/watershed/pages/watershed_management.aspx.

About the Boulder Creek Watershed

The Boulder Creek Watershed is located in Colorado's Front Range and is approximately 1,447 square miles in size. The watershed encompasses all of the land that drains into Boulder Creek. In addition to the Town of Boulder, which shares the Creek's namesake, the other towns located in the watershed are Nederland, Louisville, Lafayette, Erie, Superior, and portions of Arvada, Broomfield, and Frederick.

The watershed provides important habitat to numerous native fish species, including creek chub, fathead minnows, green sunfish, longnose dace, longnose suckers and white suckers. However, many non-native species have also become established within the Boulder Creek Watershed, including a large population of brown trout.

A broad range of other species live in the Boulder Creek Watershed as well. Local mammal species include mule deer, coyotes, red foxes, yellow-bellied marmots, bobcats, and others. The watershed likewise supports a thriving bird population, including the great horned owl and black-billed magpie, as well as warblers, tanagers, and towhees in the summertime





For local communities, Boulder Creek and its tributaries are used for drinking water, irrigation, electricity generation, and recreation. As to the latter, hundreds of locals descend upon the Creek in July for "Tube To Work Day" – which is just one example of the community's close connection to its waterways. Local residents frequently fish, hike, swim, and otherwise enjoy Boulder Creek and other local waters.

Threats to the Ecosystem and Community

Overview

As the population has grown in the Boulder Creek Watershed area, potential water-quality effects from urbanization have increased. An increase in impervious surface area has resulted in accumulating sediment and contaminants through runoff.

Increased population additionally results in more wastewater, which contributes to:

- Increased algae blooms and eutrophication, which produce dangerous toxins, increase treatment costs, and create dead zones by using all oxygen in the water necessary for other life.⁴
- The presence of organic wastewater contaminants which are generally unregulated, such as pharmaceutical drugs, hormones, and cleaning products. Unfortunately, all of these have been found in Boulder Creek.
- Elevated levels of Escherichia coli (E. coli), a fecal indicator bacteria, which are present in portions of both the urban and agricultural areas of the watershed.⁵

Other threats to local waterways include historical high-country mines leaching toxic chemicals into streams in the watershed, low flows, high temperature, channelization, harmful dams, an altered flow regime, siltation, and more. While the Boulder Creek Watershed and its waters may appear pristine to visitors, they face many challenges – and these may worsen as the population continues to grow.

Extirpated and Imperiled Species within Boulder Creek Watershed⁶

Extirpated: Grizzly Bear, Black-footed Ferret, Swift Fox, Gray Wolf, Wolverine, Pronghorn, Bison, Barrow's Goldeneye, Plains Sharp-tailed Grouse, Long-billed Curlew, Mountain Plover, Great Plains Toad, Hornyhead Chub, Blacknose Shiner, Northern Redbelly Dace, Lost Ethmild Moth, and River Jewelwing

^{4 &}quot;Assessing the Contribution of the Environmental Parameters to Eutrophication," International Journal of Environmental Research and Public Health, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4997450.

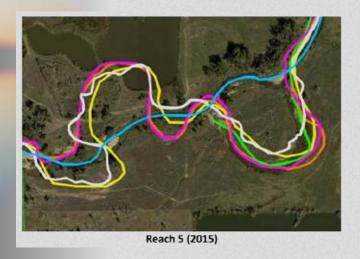
^{5 &}quot;USGS Water Quality of the Boulder Creek Watershed, Colorado," Nature Index, https://www.nature index.com/institution-outputs/united-states-of-america-usa/usgc-water-quality-of-the-boulder-creek-water-shed-colorado/58d49127140ba00a3f8b456a.

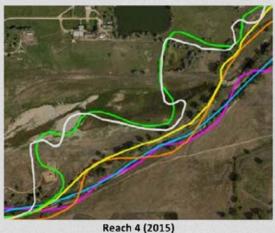
⁶ Boulder County Parks and Open Space. 2017. Boulder County Wildlife Species of Special Concern

Species of special concern (declining and/or rare): White-tailed Jackrabbit, Preble's Meadow Jumping Mouse, Northern Harrier, Burrowing Owl, Willow Flycatcher, Loggerhead Shrike, Short-Horned lizard, Brassy Minnow, Lake Chub, Common Shiner, Stonecat, Plains Topminnow, Greenback Cutthroat Trout, Northern Leopard Frog, Boreal Toad, Rocky Mountain Capshell, Cylindrical Papershell, Banded Physa, Western Bumblebee, Regal Fritillary

Historic Stream Flows

Since at least the 1930's, human impact such as land use practices have contributed to the stark decrease in presence and flow of Boulder Creek. Historical stream alignments indicate channel straightening and sinuosity changes, as reported in the Boulder Creek Restoration Master Plan of 2015. The report explicitly states that "The channel has been straightened significantly by removing the natural sinuosity of the stream. This has led to steeper stream slopes and faster moving stream flows which negatively impact the entire biodiversity and health of the stream."





(Boulder Creek Restoration Master Plan).



[&]quot;Boulder Creek Restoration Master Plan," Boulder County, City of Boulder, City of Longmont, pg. 34-36 https://www-static.bouldercolorado.gov/docs/Boulder_Creek_Restoration_Master_Plan_-_ICON_ 2015-1-201610280929.pdf

Creek Rights Summary

The Rights of Nature, when enforced, will provide the creek the rights to flow, to restoration, to perform essential functions, and to be free from pollution. These rights would be implemented through a variety of local and regional programs using many of the most cutting-edge approaches watershed protection. Overall, the goal of recognizing the rights of the Boulder Creek Watershed would be allow it the opportunity to rebuild biodiversity and regain a healthy flow of water.

Reservoir Projects

Dams offer many permanent negative impacts to free-flowing rivers that directly alter their original state and destroy species and ecologically rich riparian zones. Depending on the size and scale of the reservoir project, the consequences often include transformations to physical and chemical properties of the river that make it significantly less habitable for native flora and fauna. Current dam projects that threaten water quality and river systems in Boulder include the Gross Dam Expansion project on South Boulder Creek, and Barker Dam.

Damming comes with great environmental consequences. According to International Rivers, "The alteration of a river's flow and sediment transport downstream of a dam often causes the greatest sustained environmental impacts. Life in and around a river evolves and is conditioned on the timing and quantities of river flow. Disrupted and altered water flows can be as severe as completely de-watering river reaches and the life they contain."

8 "Environmental Impacts of Dams," International Rivers, https://www.internationalrivers.org/

Rivers are the lifeblood of ecological processes, and the free-flowing waterways of the Boulder Creek Watershed are particularly special as they represent the intersection of natural and urban environments. Giving legal rights to the Boulder Creek Watershed would require the community to reexamine its water priorities, creating a future relationship with its waterways based on restoration and protection rather than damming and versions.

Chemical Pollution

Water quality of Boulder Creek varies based on elevation, in which it is best in high-elevation headwaters. As population, agriculture, contaminant sources increase downstream, water quality declines.

Although relatively healthier than the lower-elevation points, the high-elevation points in the watershed are threatened from indirect chemical pollution sources from coal-fired power plants, vehicles, and agricultural activities. Air pollutants from these practices include – but are not limited to – particulate matter (PM10 and PM2.5), volatile organic compounds (VOCs), nitrogen oxides (NOx), sulfur dioxide (SO2), and ammonia (NH3), which make their way to headwater areas through various forms of precipitation. Deposition of these chemicals affect the pH level of the headwaters, which presents threats to aquatic ecosystems and irregular growth of plants.

As the waters of Boulder Creek and its tributaries make its way to lower elevation points where urban areas exist, potential contaminants increase significantly as well as temperature, pH, and dissolved solids. Contaminants such as "oil, grease, metals, and road salt from transportation, sediment from construction, and nutrients and pesticides from landscaping" make their way (untreated) into waterways after precipitation washes them into nearby storm drains.

Summary of Challenges and Opportunities

- Restore historic stream flows
- Eliminate further dam construction and lessen impacts of existing dams.
- Eliminate chemical pollution.
- Eliminate dependence on Colorado River water diversions.
- Eliminate gallery forests while restoring native grasslands and wetlands.
- Restore and expand habitat for threatened species.
- Reintroduce extirpated species.
- Re-create natural fire regimes.
- Move from forest "management" toward holistic forest conservation.
- Protect Creek riparian corridors and floodplain from oil and gas extraction activities and subdivision construction, which are destroying habitat for native wildlife, including bald eagles.

WHY RIGHTS OF NATURE BELONGS IN BOULDER

Need for Water Conservation

On the State and Municipal Level

The state can and must invest in aggressive, diversified strategies to reduce demand and increase supply in cost-effective, efficient ways. Colorado fresh water is balanced between the agriculture sector and residential units, while our natural rivers and lakes attract success in the state's outdoor recreation industry and attract visitors from various states. However, this availability is at grave risk due to a variety of factors. As noted by Conservation Colorado, "Climate change, population growth, and outdated management threaten our water supply. Unless we learn to better manage and conserve our Colorado water, we'll be facing a dire water crisis." 10

Rights of Nature will help the City of Boulder achieve its watershed goals. Within the 2016 Water Efficiency Plan (WEP), it is stated that "Boulder's future water use may rise over the longer term given the potential effects of climate change. Expected warmer temperatures are likely to increase outdoor water demands, which may increase per capita uses in each customer sector." To address these challenges (which include a growing population), reach Boulder's conservation goals, and maximize water conservation efforts, strategies such as the Rights of Nature should be

- $10 \qquad \hbox{``Our Water,'' Conservation Colorado, https://conservationco.org/issues/ourwater/} \\$
- "2016 Water Efficiency Plan for the City of Boulder, CO" Rozaklis & Associates, LLC, https://www-static.bouldercolorado.gov/docs/WEP_October_Final-1-201610180831.pdf

considered and implemented.

In protecting (through the granting of legal rights) the waterways which we rely on for drinking water, irrigation, manufacturing, agriculture, recreation, and so forth, we effectively ensure the sustainable, necessary, and reasonable human water needs as well as the inherent needs of the waterways themselves. In other words, the Rights of Nature go hand in hand with a human right to a healthy environment.

Benefits and Implications

Boulder Rights of Nature (BRON), in partnership with Earth Law Center and other local partners, seeks legal rights for the Boulder Creek Watershed through a new local law. This would make it the first watershed in the United States to be recognized as a living entity possessing legal rights. The fundamental rights that would be possessed by the Boulder Creek Watershed and all waters therein would include, at minimum:

- (1) The right to flow,
- (2) The right to perform essential functions within its ecosystem,
- (3) The right to be free from pollution,
- (4) The right to feed and be fed by sustainable aquifers,
- (5) The right to native biodiversity, and
- (6) The right to restoration.

In reiteration, this legal paradigm would allow the Boulder Creek Watershed to be restored to health and permanently protected as a right, rather than its protection being dependent on the political and economic tides. Giving the watershed legal rights will benefit local ecosystems as well as the entire Boulder population which relies upon and enjoys the Boulder Creek and its watershed.

The law would also call for the appointment of one or more legal guardians of the Boulder Creek Watershed to oversee its rights and interests. These legal guardians would act on the watershed's behalf in legal proceedings and ensure that it is fairly represented in the local democratic process. As the longest-serving Supreme Court Justice William O. Douglass said in support of the Rights of Nature, "Those who have that intimate relation with the inanimate object about to be injured, polluted, or otherwise despoiled are its legitimate spokesmen." Furthermore, Boulder County and its residents most definitely do have "intimate relation" with the natural world. Boulder County has protected around 45,000 acres of open space, contains around 151 public trails, and has a population known for its connection to the environment.

So, will Boulder take the next step in its environmental protections by recognizing the rights of the Boulder Creek Watershed? If so, Boulder could become a model for other communities that wish to create new laws that protect Nature as a partner on our shared planet, not as mere property. We look forward to seeing the benefits of this emerging paradigm in Boulder and the effect that it may have across the world.

