

**BEFORE THE OIL AND GAS CONSERVATION COMMISSION OF
THE STATE OF COLORADO (COGCC)**

**IN THE MATTER OF CHANGES TO THE RULES AND REGULATIONS OF THE
OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF COLORADO
CAUSE NO. 1R DOCKET NO. 200600155**

**Kyla Bennett Profile Testimony
on behalf of
Western Resource Advocates (300 Series)**

August 14, 2020

On behalf of Western Resource Advocates (WRA), Kyla Bennett, JD and PhD and Director and Science Policy Advisor for New England Public Employees for Environmental Responsibility (PEER)¹, provides the following **Profile Testimony** in further support of WRA’s proposed amendments to Colorado Oil and Gas Conservation Commission (COGCC) 300 Series, including **Rule 303(a)(5) – the Cumulative Impacts Evaluation Rule** – which implements the Commission’s obligation to “evaluate and address the potential cumulative impacts of oil and gas development,” C.R.S. § 34-60-106(11)(c)(II), as it carries out its mission change mandate to protect and avoid and minimize adverse impacts, and safeguard public health and the environment, from oil and gas operations. C.R.S. § 34-60-106(2.5)(a).

Dr. Bennett’s testimony also provides further support for WRA’s proposed amendments to Colorado Oil and Gas Conservation Commission (COGCC) **Rule 604** to protect Colorado’s headwaters, riparian areas and wetlands and **Rule 411** to protect drinking water supplies.

1 **Q. Please summarize your testimony.**

2 A. After providing a brief summary of my education and experience, I first provide
3 my conclusions on the current “Mission Change” rulemaking as it relates to evaluating
4 and addressing cumulative impacts. I urge the COGCC to ensure that its rules require
5 the necessary analyses to identify and resolve *all* adverse consequences to Colorado’s
6 resources, whereby cumulative effects are examined over both space and time, and
7 include impacts from all reasonably foreseeable projects.

8 Second, I provide testimony on the necessary and reasonable elements of a
9 cumulative impact analysis adequate to support well-informed action and to ensure
10 that the COGCC can carry out its mission to protect and avoid and minimize adverse
11 impacts to ecosystem values from oil and gas operations.

12 Third, I describe the types of effects from human-caused activities that, together
13 with oil and gas development, can and do have cumulative adverse consequences for

¹ Kyla Bennett’s CV is attached as WRA Exhibit KB-1.

1 wildlife and biological resources, water, soils and the environment. These are the types
2 of impacts that the 300 Series rules must ensure are examined and addressed as
3 COGCC reviews applications for new oil and gas operations, determines whether
4 conditions are necessary to avoid and minimize adverse cumulative impacts, and
5 concludes if the COGCC has ultimately protected public health and the environment.

6 Finally, I explain why it is not appropriate for the COGCC to mimic the
7 weakened approach to environmental analysis recently adopted by the Trump
8 Administration. The new NEPA regulations undermine the purpose of the statute,
9 which is to ensure that agencies are informed about environmental impacts that should
10 be weighed before decisions are made and before any actions are taken.

11

12 **Q. Please provide a summary of your education and experience.**

13 A. I am the Science Policy Director for Public Employees for Environmental
14 Responsibility (PEER), a national nonprofit that supports current and former public
15 employees who seek a higher standard of environmental ethics and scientific integrity
16 within their agencies. We do this by defending whistleblowers, shining light on
17 improper or illegal government actions, working to improve laws and regulations, and
18 supporting the work of other organizations. I have a PhD in Ecology and Evolutionary
19 Biology from the University of Connecticut, and a JD with a certificate in Natural
20 Resources and Environmental Law from Lewis and Clark Law School. Prior to my
21 position at PEER, I worked at the U.S. Environmental Protection Agency (EPA) for
22 almost ten years as both a wetland permit reviewer under Section 404 of the Clean
23 Water Act, and as head of the Region's wetlands enforcement program. I have reviewed

1 and commented on dozens of Environmental Impact Statements (EISs) prepared under
2 the National Environmental Policy Act (NEPA), and Environmental Impact Reports
3 (EIRs) under analogous state environmental protection laws.

4 **Q. Based on your review of the current draft of the 300 Series and WRA’s**
5 **proposed rule addressing the elements of an adequate cumulative impact**
6 **analysis, what are your conclusions?**

7 A. It is undeniable that “[g]overnment oversight is necessary to coordinate multiple
8 users of the land. The cumulative effects of energy development, along with timber
9 harvest, agriculture, and recreation, can be destructive.”² The cumulative impact of
10 energy development is largely unquantified, but that does not release the COGCC or
11 any other governmental agency from attempting to assess those cumulative impacts
12 when considering whether to approve any particular project. Specifically,

13 Science provides the biological basis for formulating conservation actions and
14 shaping policies that permit sustainable development while safeguarding
15 wildlife. Paramount to linking science with management is the ability to ask the
16 right questions in a way that is relevant to decision makers. Equally important
17 for producing credible science is scrutiny of our research approach to ensure that
18 its rigor stands up to the highest levels of peer review. The best and most recent
19 studies are those that evaluate cumulative effects, defined here as the
20 synergistic, interactive, and sometimes unpredictable outcomes of multiple land
21 use practices, including energy development, that aggregate over time across
22 broad landscapes.³

23 It is incumbent on the COGCC to conduct the necessary analyses to identify and
24 resolve *all* adverse consequences to Colorado’s resources. If done properly, this would

² WRA Exhibit KB-8 at ix-x.

³ *Id.* at 23.

1 result in a process whereby cumulative effects are examined over both space and time,
2 and include impacts from all reasonably foreseeable projects. As such, COGCC should
3 consider Western Resource Advocates’ proposed amendments to sections of the 300
4 Series.

5
6 **Q. Please describe the reasonable and necessary elements of an adequate**
7 **cumulative impact analysis of a resource extraction proposal.**

8 A. COGCC has an obligation under its current regulations to protect stated
9 environmental values, and to avoid and minimize direct, indirect and cumulative
10 adverse impacts to those values. Because this mandatory duty already exists, it makes
11 sense to articulate the analysis that needs to be conducted in a precise and
12 comprehensive manner to provide certainty to the regulated public, and to protect
13 Colorado’s environment.

14 Resource development and extraction can have impacts not only on the
15 environment, but also on the health of the communities in the area.⁴ Resource
16 extraction can lead to additional development, as well as human health impacts:

17
18 Cumulative impacts arise when multiple forms of resource development occur
19 simultaneously on the same land base. The co-existence of these developments
20 can then interact with both pre-existing effects, and the longer-term impacts of
21 historical decisions and past land uses [citations omitted]. We experience
22 cumulative impacts on a daily basis, and they leave lasting legacies for people,
23 communities, and ecosystems... Cumulative impacts from multiple resource
24 developments within the same landscape are also driven by global processes
25 spanning climate change, corporate power dynamics, urbanization, and other
26 megatrends, with an array of overlapping environmental, community, and
27 health consequences.⁵
28

⁴ WRA Exhibit KB-11. “Addressing the Environmental, Community, and Health Impacts of Resource Development: Challenges across Scales, Sectors, and Sites.”

⁵ *Id.*

1 COGCC should not look solely at the impacts of any single oil and gas operation, nor
 2 should it look solely at the ecological impacts to the non-human ecosystem. It is critical
 3 to examine additional human health impacts, especially to disproportionately impacted
 4 communities. Failure to consider this array of impacts can lead to lasting negative
 5 legacies for the people of Colorado.

6 Oil and gas operations can lead to impacts from a variety of activities other than
 7 the exploration/extraction activities. Five federal agencies developed this chart on
 8 cumulative impacts:⁶

GENERAL CATEGORY OF ACTIVITY ¹	AMOUNT OF DISTURBANCE (Ac., Mi.)	YEAR OF ACTIVITY	RECLAMATION (AMOUNT & YEAR)	RESOURCE OF CONCERN
PAST AND PRESENT ACTIONS				
Roads (specify type)				Air, water, wildlife
Mineral development (specify type)				Air, water, wildlife, visuals
Grazing (specify improvements)				Water, soils, wildlife
Timber				Water, soils, wildlife, visuals
Fire				Air, water, soils, wildlife, visuals
Recreation				Water, soils, wildlife
Inholdings				Water, soils, wildlife
Residential development				Air, water, soils, wildlife
REASONABLY FORESEEABLE FUTURE ACTIONS				
Roads (specify type)				Air, water, wildlife
Mineral development (specify type)				Air, water, wildlife, visuals
Grazing (specify improvements)				Water, soils, wildlife
Timber				Water, soils, wildlife, visuals
Fire				Air, water, soils, wildlife, visuals
Recreation				Water, soils, wildlife
Inholdings				Water, soils, wildlife
Residential development				Air, water, soils, wildlife

¹ General categories are presented here as guides to identifying specific activities and details about them in an identified area of decision-making and analysis. Records of specific information should include specifics about the nature and location of past, present, and reasonably foreseeable future activities.

9
 10
 11 As the chart elucidates, cumulative impacts can occur from mineral development,
 12 roads, residential development, and the like. Moreover, these agencies caution:

13

⁶ WRA Exhibit KB-9. Reasonably Foreseeable Development Scenarios and Cumulative Effects Analysis For Oil and Gas Activities On Federal Lands In the Greater Rocky Mountain Region.

1 Determining cumulative effects depends on information about the proposed
2 action as well as information about other reasonably foreseeable activities for
3 each level of decision-making. Forecasting future activities, including expected
4 levels of oil and gas development, is critical to adequately evaluating proposed oil
5 and gas actions and alternatives, and determining appropriate mitigation
6 measures for effects of the action. Forecasting of reasonably foreseeable activities
7 is a vital component of effects analysis, even though predictions of future actions
8 cannot be expected to be precise.⁷
9

10 Therefore, it is important for COGCC to have an expansive view of cumulative
11 impacts, and for its regulations to specifically lay out impacts that will be considered
12 from past actions, the projects currently being assessed, and reasonably foreseeable
13 actions. These should include, but are not limited to, impacts from traffic, air quality,
14 soil disturbance, noise, dust, odor, habitat destruction, and impacts to wetlands,
15 riparian, and wildlife habitat.
16

17 **Q. What are the types of impacts associated with oil and gas operations?**

18 A. Resource exploration and extraction can damage or destroy wetlands, waters,
19 soils, wildlife habitat, and riparian areas, both in the immediate vicinity of the activity
20 or far downstream. These impacts include the direct loss of land through clearing,
21 excavation, and construction, or indirect fragmentation of habitat. Construction of
22 access roads and/or trails can affect drainage, and can lead to drying of wetlands,
23 creation of barriers to wildlife movement, and disturbance of feeding, breeding and
24 nesting activities. Opening up previously closed areas can provide opportunities for
25 recreational impacts. Use of these access points, in addition to exploration and

⁷ *Id.*

1 extraction activities themselves, can cause noise, dust, compaction of soils, and injury
2 and mortality to wildlife.

3

4 Erosion and sedimentation can also occur on road and trail surfaces, and this
5 sedimentation can reduce biological productivity in wetlands and waters, disturb
6 wildlife, and affect downstream habitats. Chemical contamination from machinery and
7 vehicles (oils, filters, solvents, etc.) can impact wetlands, waters and riparian areas,
8 and result in impacts to plants and animals and their habitats. Drilling waste can
9 contaminate soils, wetlands, and waters. Pipelines can result in spills, which can have
10 drastic consequences for fish, wildlife, soils, and drinking water. Sewage treatment
11 facilities constructed for workers can also cause contamination of soils, wetlands, and
12 waters.

13 The impacts enumerated above do not occur in a vacuum. Rather, they must be
14 examined in conjunction with other reasonably foreseeable impacts in the watershed.
15 For example, oil and gas extraction can lead to additional residential and commercial
16 developments in the area to service workers, increased recreation can harm fragile
17 ecosystems, and other exploration and/or extraction developments can move into the
18 area. Moreover, oil and gas operations can remain active for decades, and the
19 cumulative impacts associated with years of use must be examined.

20

21 **Q. What are the cumulative impacts that threaten drinking water?**

22 **A.** An EPA analysis of the surface drinking water provided by intermittent,
23 ephemeral, and headwater streams in the U.S. shows that Colorado is heavily

1 dependent on these small stream systems for drinking water.⁸ Of the 48 Colorado
2 counties examined, all but ten counties relied exclusively on these intermittent,
3 ephemeral, and headwaters streams for drinking water, and the vast majority of the
4 ten counties that did not have 100% reliance on these small streams had very heavy
5 reliance.⁹ The total population relying on these streams for drinking water is over 3.7
6 million people.¹⁰

7 The headwaters of Colorado also provide a water supply to nineteen additional
8 states, as well as Mexico.¹¹ The USGS National Hydrography Dataset (“NHD”), which
9 is likely an underestimate of stream miles, estimates that 68% of Colorado's waters are
10 temporary.¹² The EPA states that:

11
12 Ephemeral and intermittent streams provide the same ecological and
13 hydrological functions as perennial streams by moving water, nutrients, and
14 sediment throughout the watershed. When functioning properly, these streams
15 provide landscape hydrologic connections; stream energy dissipation during
16 high-water flows to reduce erosion and improve water quality; surface and
17 subsurface water storage and exchange; ground-water recharge and discharge;
18 sediment transport, storage, and deposition to aid in floodplain maintenance and
19 development; nutrient storage and cycling; wildlife habitat and migration
20 corridors; support for vegetation communities to help stabilize stream banks and
21 provide wildlife services; and water supply and water-quality filtering. They
22 provide a wide array of ecological functions including forage, cover, nesting, and
23 movement corridors for wildlife. Because of the relatively higher moisture
24 content in arid and semi-arid region streams, vegetation and wildlife abundance
25 and diversity in and near them is proportionally higher than in the surrounding
26 uplands. In the rapidly developing southwest, land management decisions must

⁸ WRA Exhibit KB-12. Analysis of the Surface Drinking Water Provided By Intermittent, Ephemeral, and Headwater Streams in the U.S. Completed by U.S. EPA (July 2009).

⁹ *Id.* One county had 0% reliance on intermittent, ephemeral and headwater streams, and the other nine had 72%, 80%, 96%, 99%, 99%, 99.62%, 99.73%, 99.82%, and 99.86%, respectively.

¹⁰ *Id.*

¹¹ https://www.colorado.gov/governor/sites/default/files/inline-files/co_wotus_comments.pdf

¹²

<https://d3dqsm2futmewz.cloudfront.net/docs/arc/publications/EphemeralStreamsReport.pdf>

1 employ a watershed-scale approach that addresses overall watershed function
2 and water quality. Ephemeral and intermittent stream systems comprise a large
3 portion of southwestern watersheds, and contribute to the hydrological,
4 biogeochemical, and ecological health of a watershed. Given their importance
5 and vast extent, it is concluded that ***an individual ephemeral or***
6 ***intermittent stream segment should not be examined in isolation.***
7 Consideration of the cumulative impacts from anthropogenic uses on these
8 streams is critical in watershed-based assessments and land management
9 decisions to maintain overall watershed health and water quality (emphasis
10 added).¹³

11 EPA also found that “headwater streams, even where seasonally dry,
12 cumulatively generate a large fraction of the nation’s stream and river flows.”¹⁴
13 Therefore, managing the impacts of oil and gas development in the area of ephemeral,
14 intermittent, and headwaters streams is critical to water quality and quantity. If oil
15 and gas operations are assessed one project at a time, without considering reasonably
16 foreseeable projects, the effect on Colorado’s drinking water would be devastating. The
17 continuous alteration and/or destruction of these vital small streams could ultimately
18 result in a disaster for more than 3.7 million Colorado residents, not to mention
19 residents of 19 other states and Mexico.

20 **Q. What are the cumulative impacts from oil and gas operations that**
21 **threaten riparian areas?**

22 A. Riparian areas (lands along streams, rivers and other water bodies) such as
23 floodplains and streambanks are ecologically different from surrounding lands because
24 of their unique soil and vegetation driven by the presence of water. These riparian
25 areas are fairly uncommon in the arid southwest, and provide habitat for threatened

¹³ *Id.* at iii.

¹⁴ WRA Exhibit KB-13. Connectivity Of Streams And Wetlands To Downstream Waters: A Review And Synthesis Of The Scientific Evidence, EPA, 2015 (hereinafter “Connectivity Report”) p. 3-7.

1 and endangered species, and contain unique and diverse flora. Riparian areas can also
2 help prevent downstream flooding and assist with nutrient cycling.

3 Human activities near and in riparian areas can have long-term adverse effects.
4 Clearing vegetation, building roads near or through riparian areas, and gas or oil
5 exploration and extraction can introduce exotic invasive species, increase the heat of
6 the water body, destroy plant diversity, lead to soil compaction and erosion, and disturb
7 wildlife or interrupt migratory corridors. Land use changes such as removal of
8 vegetation or compacting soil can cause water to flow more quickly from a watershed
9 through a riparian zone, increasing nonpoint pollution, decreasing water storage, and
10 increase flooding downstream. Finally, damage to riparian areas can affect recreation
11 and scenic values.

12

13 **Q. What are the cumulative impacts that threaten fish and wildlife?**

14 A, As of 2003, 16 million acres in Colorado were open to oil and gas drilling.¹⁵ In
15 2008, Colorado Division of Parks and Wildlife “stressed that minimizing the density of
16 oil and gas development can minimize impacts to wildlife.”¹⁶ Given the immense
17 amount of land open to oil and gas operations, combined with the potential devastating
18 effects to fish and wildlife, it is critical that the COGCC evaluate cumulative impacts
19 associated with these developments in a comprehensive manner.

20 Oil and gas operations can impact numerous wildlife species through direct
21 alteration or destruction of habitat (including water contamination), interrupt feeding,

¹⁵ WRA Exhibit KB-10 at 6.

¹⁶ *Id.* at 17.

1 nesting, breeding or migratory corridors, allow invasive species to outcompete native
2 food species, or interrupt normal activities through noise and dust impacts. Impacts to
3 threatened and endangered species are often avoided, but impacts to keystone or
4 otherwise important species are often given far less consideration.

5 Beaver. For example, the beaver (*Castor canadensis*) is a species native to
6 Colorado and is considered a keystone species (a species on which other species in an
7 ecosystem depend, and if it is extirpated, would alter the entire ecosystem drastically).
8 Beaver dams in the Colorado River affect the “depth, extent, and duration of inundation
9 resulting from a 10-year flood event... [and] attenuate...declines in water tables during
10 drier summer periods.”¹⁷ The primary hydrologic effects from beaver dams occur
11 downstream from the dam itself for hundreds of meters. These dams increase the
12 extent of waterlogged soils, therefore increasing hydrologic connectivity, affect fish
13 species, and modify nutrient cycling.¹⁸ Beaver are highly susceptible to human presence
14 and noise, and exclusion of this species from certain areas will have considerable
15 ramifications.

16 Sage-grouse. Recent research into the effects of oil and gas development 50 years
17 into the future on Greater Sage-grouse show that populations will shift and result in
18 “substantive changes in distribution and abundance when cumulated over several
19 decades and throughout the regional population.”¹⁹ The researchers found that when
20 cumulative impacts were taken into account, including reasonably foreseeable
21 development and climate-induced vegetation changes, abundance of the Greater Sage-

¹⁷ *Id.* at 4-18.

¹⁸ *Id.*

¹⁹ WRA Exhibit KB-6.

1 grouse was reduced by half.²⁰ They concluded that “[m]ultiple stressors and their
2 cumulative impacts need to be broadly considered through space and time to avoid
3 underestimating the impacts of multiple gradual changes and overestimating the
4 ability of populations to withstand change.”²¹

5 Ungulates. Ungulates such as pronghorn and elk are also susceptible to
6 disturbances and alterations of habitat associated with oil and gas operations. These
7 ungulates spend much of their lives grazing, and interruption of feeding can lead to
8 malnutrition, low birth weight of offspring, and even death.²² Disturbances due to oil
9 and gas operations displace pronghorn and elk from prime feeding habitats, and can
10 lead to adverse impacts to individuals and the population as a whole.

11 In Colorado, both deer and antelope populations have dropped precipitously over
12 the past 30 years.²³ Some scientists believe pronghorn populations have fallen by 64%,
13 and mule deer by 36%; these declines are associated with oil and gas development.²⁴
14 Other impacts on these ungulates are contributing to their decline, including changes
15 in fire history regimes, overharvesting, predators, and illness such as chronic wasting
16 disease.²⁵

17 In order to properly assess impacts to these species, COGCC must be able to look
18 at impacts across seasons, over time, and to activities such as feeding, breeding, and
19 migration, associated with all reasonably foreseeable developments.

²⁰ *Id.*

²¹ *Id.*

²² *Id.* at 18.

²³ WRA Exhibit KB-2.

²⁴ *Id.*

²⁵ WRA Exhibit KB-8 at 82.

1 Waterfowl. Settling ponds associated with petroleum extraction from oil sands
2 can have huge impacts on waterfowl. Migrating waterfowl can land on these ponds,
3 becoming coated with oil and other toxins.²⁶ Moreover, these ponds can fail, sending
4 contaminated water into nearby streams and wetlands. Given that migratory ponds
5 throughout the country are at risk from the Trump Administration’s new WOTUS
6 definition, discussed in more detail below, it is critical that cumulative impacts to
7 waterfowl be examined.

8 Songbirds. Songbirds can also be impacted by oil and gas operations, and
9 cumulative impact analyses are critically important. Energy production is often coupled
10 with construction of power lines, towers, well pads, flare stacks, and compressor pads,²⁷
11 all of which can adversely affect songbirds. Aside from direct habitat loss, especially for
12 ground-feeding birds, songbirds can be hit by vehicles, poisoned by discharges and
13 settling ponds, injured in collisions with towers, etc. Some songbird species are
14 extremely sensitive to human presence, and will be displaced entirely from their
15 habitat. This can result in relocation to subpar habitat, which in turn can lead to poor
16 reproduction. Invasion of exotic plants can also adversely impact songbirds, and noise
17 associated with exploration and extraction activities can displace birds to less suitable
18 habitats and cause malnutrition. Moreover, noise can mask communication, which is
19 critical for songbird reproduction. Finally, wind power in Colorado can lead to
20 substantial numbers of bird deaths.²⁸ Cumulative impacts that need to be taken into

²⁶ WRA Exhibit KB-6 at 25.

²⁷ *Id.* at 27.

²⁸ WRA Exhibit KB-8 at 133.

1 account include road noise, collisions, and displacement from suitable habitat,²⁹
2 together with impacts from wind power.

3 Fish. Wetlands and headwater streams, two habitats most threatened by oil and
4 gas developments in Colorado, provide invaluable habitat to both rare and endangered
5 fish species, and commercially and recreationally important fish.³⁰ For example, just
6 one intermittent stream in Colorado, the Arikaree River, provides habitat for 16 native
7 fish species, including the Orangethroat darter, which is imperiled.³¹ The intermittent
8 Cottonwood Creek in Colorado provides habitat for three rare fish species that
9 conservationists are valiantly trying to keep off the Endangered Species Act list.³²

10

11 Impacts to these smaller stream systems are often thought of as less important
12 than perennial waters, and are therefore often more susceptible to development and
13 destruction. Cumulative impacts to these smaller stream systems from oil and gas
14 operations, together with other developments in a watershed, may result in severe
15 impacts to fish habitat. In Colorado, the trout fishery alone was worth \$1.3 billion in
16 2011.³³

17

18 **Q. What are the cumulative impacts that threaten wetlands?**

19 A. The Trump Administration recently redefined WOTUS such that most so-called
20 “geographically isolated” wetlands, and all ephemeral streams and some intermittent

²⁹ WRA Exhibit KB-6 Exhibit at 30.

³⁰ WRA Exhibit KB-11. Headwaters Streams and Wetlands are critical for sustaining fish, fisheries, and ecosystem services

³¹ *Id.* at 80.

³² *Id.* at 83.

³³ *Id.* at 84.

1 streams, are no longer afforded protection under the federal Clean Water Act. The new
2 WOTUS definition is currently in effect in every state *except* Colorado. Many
3 environmental groups, including PEER, are suing EPA over the new rule, but it is
4 unclear what will ultimately occur. Similarly, it is short-sighted to assume that the new
5 WOTUS definition will not eventually be used in Colorado.

6 Because Colorado is part of the arid West, the new WOTUS rule would be
7 catastrophic to wetlands and waters throughout the state. The State of Colorado
8 estimated that somewhere between 15% and 54% of the wetlands in the state would no
9 longer be protected by the Clean Water Act.³⁴ Removal of these wetlands from federal
10 jurisdiction endangers them from more than just fill. If a wetland is no longer
11 considered a WOTUS, discharges are allowed without a permit.

12 Colorado does not have its own program to permit discharges of fill to state
13 waters, and instead has relied on the federal Clean Water Act to protect these
14 wetlands. Now that this federal protection is at risk, it is unclear what the cumulative
15 impact on wetlands and waters in Colorado will be. The Governor has stated that,
16 “[c]umulatively, illegal fills, degradation from out of state waters, and a possible
17 weakening of Colorado’s NPDES program are likely to lead to a degradation in
18 Colorado’s water quality.”³⁵

³⁴ https://www.colorado.gov/governor/sites/default/files/inline-files/co_wotus_comments.pdf
at 8.

³⁵ *Id.* at 14.

1 Loss of legal protections for these wetlands, together with these small streams,
2 will result in a domino effect to the biological, chemical and physical integrity of all
3 waters, including to drinking water quality, water quantity, flood control, wildlife and
4 fish habitat, and recreation. According to Colorado Parks and Wildlife (CPW),
5 “[w]etlands comprise less than two percent of Colorado’s landscape but provide benefits
6 to over 75% of the species in the state, including waterfowl and several declining
7 species.”³⁶ Twenty-six percent of Colorado’s wildlife species are wetland dependent, and
8 Colorado has lost half of its wetland acres through drainage, fill, and excavation.³⁷

9 Given the precarious legal status of wetlands protection in Colorado, it is
10 imperative that COGCC carefully assess the cumulative impacts of oil and gas
11 operations to wetlands. The loss of additional wetlands will result in significant adverse
12 impacts to the water, fish, wildlife and residents of Colorado.

13 **Q. Would it be appropriate for the COGCC to adopt the approach to**
14 **environmental analysis recently adopted by the Trump Administration?**

15 A. The COGCC should not mirror the Trump Administration’s weakening of the
16 cumulative impacts analysis in NEPA reviews in its own regulations.³⁸ Specifically, the
17 COGCC is charged with evaluating and addressing cumulative impacts, regardless of
18 the recent rule change in federal NEPA regulations. In many cases across the country,
19 states have been forced to pick up the slack where the federal government has failed to

³⁶ <https://cpw.state.co.us/aboutus/Pages/Wetlands.aspx>

³⁷ <https://cpw.state.co.us/Documents/LandWater/WetlandsProgram/CDOWWetlandsProgramStrategicPlan110804.pdf>

³⁸ 85 Fed. Reg. 43304 (July 16, 2020).

1 act (e.g., per-and polyfluoroalkyl substances (PFAS) limits in drinking water), or where
2 the administration has rolled back environmental rules and regulations (e.g., waters of
3 the United States, or WOTUS, definition). The attempted rollback of consideration of
4 cumulative impacts under NEPA should be treated no differently.

5 The new federal rule intentionally undermines NEPA, the nation’s foundational
6 environmental statute, and the policy it advanced: that the federal government
7 should “to the fullest extent possible” elevate environmental considerations to the same
8 level as technical and economic factors which have historically dominated
9 agency decision-making.³⁹

10 It reflects an ethos of uninformed knee-jerk deregulation that has proven fatal for an
11 overwhelming majority of similar deregulatory efforts.⁴⁰ It is unlikely that the
12 regulation will survive the numerous pending court challenges.

13 The language of NEPA itself does not contain the terms “direct,”
14 “indirect,” or “cumulative” effects. However, it is a statute about *how* to make
15 decisions. NEPA acknowledges that, absent some substantive requirements to
16 bring environmental considerations into government policymaking, these
17 considerations would continue to be sidelined. As such, Congress
18 rightly *mandated* that agencies fully consider the environmental impacts of their
19 actions before they decide to act.

³⁹ House of Representatives, Conference Report [to accompany S. 1075, National Environmental Policy Act of 1969], Dec. 17, 1969, Report No. 91-765, at 9-10.

⁴⁰ The Trump Administration’s current record of defending rulemaking actions against legal challenges under the Administrative Procedure Act, 5 U.S.C. § 706 (“APA”), is 5 victories and 66 defeats. See Roundup: Trump-Era Agency Policy In The Courts, Institute For Policy Integrity, <https://policyintegrity.org/trump-court-roundup> (last visited Mar. 4, 2020).³ 85 FR 1710.

1 The Council on Environmental Quality (CEQ) recently eliminated consideration
2 of indirect or cumulative effects from NEPA analyses. Their new definition will
3 eviscerate the purpose and effectiveness of NEPA, and ignores the vast majority of
4 environmental harms stemming from agency actions. The statutory language of NEPA
5 itself mandates that reports must include “*any* adverse environmental effects which
6 cannot be avoided should the proposal be implemented” (emphasis added).⁴¹ The
7 statutory text also states that the federal government shall “recognize the worldwide
8 and long-range character of environmental problems” when considering environmental
9 harms under NEPA.⁴²

10 The new rule ignoring cumulative impacts relegates NEPA to nothing
11 more than a procedural statute, which defeats the intent and spirit of the law.
12 The purpose of NEPA is to positively influence the ultimate decision-making of
13 the agency, which must be informed about environmental impacts which should
14 be weighed before decisions are made and before any actions are taken. NEPA is
15 not a burden to agencies, but a mechanism for enhancing their decision-making.
16 Similarly, the COGCC’s decisions should be informed by consideration of the full
17 array of potential impacts.

18 If the COGCC follows in the footsteps of the federal government, it will
19 effectively eliminate the requirement that decisions should be based
20 on science. Western Resource Advocates proposes defining “cumulative impacts” as:

21 ...the impact on the environment which results from the incremental impact of
22 the action when added to other past, present, and reasonably foreseeable future

⁴¹ 42 USC § 4332(C)(ii).

⁴² 42 USC § 4332(F).

1 actions. Cumulative impacts can result from individually minor but collectively
2 significant actions taking place over a long period of time.

3
4 What an ordinary person would “reasonably foresee” based on their unfounded
5 beliefs can be very different from what the scientific community projects based on solid
6 evidence and on years of experience. Cumulative and indirect effects consideration has
7 been a fundamental part of the NEPA review since its inception, and should be adopted
8 by the COGCC as well. Not coincidentally, this consideration of cumulative and indirect
9 effects is also the major basis for NEPA challenges regarding climate change issues, the
10 body of which have recognized that analysis of climate change, an indirect and
11 cumulative effect, *is* required by the statute.

12 NEPA’s legislative history is also replete with references to the complexity of
13 environmental impacts, the consequences of “letting them accumulate in slow attrition
14 of the environment” and the “ultimate consequences of quiet, creeping environmental
15 decline” - all of which pointed to the need for an analysis of proposed impacts beyond
16 the immediate, direct effects of an action.⁴³

17 Federal courts recognized the importance of cumulative effects analysis long
18 before CEQ’s 1979 regulations. As early as 1975, the Court of Appeals for the Second
19 Circuit reversed a lower court decision in part on the grounds that the analysis in the
20 EIS at issue evaluated only the effects of the particular proposed action, a proposal for
21 dumping two million cubic yards of polluted spoil in Long Island Sound, and
22 disregarded the cumulative impacts of other related projects.⁴⁴

⁴³ 115 Cong. Rec. 29070 (October 8, 1969); see also, report accompanying S. 1075, National Environmental Policy Act of 1969, Senate Committee on Interior and Insular Affairs, July 9, 1969.

⁴⁴ *Natural Resources Defense Council v. Callaway*, 524 F.2d 79 (2nd Cir. 1975) (“a good deal of our present air and water pollution has resulted from the accumulation of small amounts

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