

Microsoft water replenishment project portfolio

End of FY24

Project no.	Project name	Implementation party	Priority location	Basin name	Project type (VWBA activity) ()	Benefit duration (years) ()	Contract FY/Operational FY	Estimated volumetric benefits (m ³) ()
1	Improving water quality in Iowa	Ducks Unlimited	Des Moines	<i>Major</i> —Mississippi-Missouri <i>Minor</i> —Middle Des Moines; North Raccoon	Wetland restoration and creation	10	2020/2022	674,940
2	Restoring North Dakota's prairie-wetlands	Audubon Great Plains	Fargo	<i>Major</i> —Saskatchewan-Nelson <i>Minor</i> —Upper Red	Land cover restoration	10	2020/2021	83,000
3	Bringing renewable water supplies to central Arizona [Retired (d)]	Bonneville Environmental Foundation (e), Gila River Water Storage	Phoenix	<i>Major</i> —North America, Colorado <i>Minor</i> —Middle Gila; Lower Salt; Lower Gila/Painted Rock	Agricultural water demand reduction measures	1	2020/2020	613,040
4	Improving water security for the Lower Colorado River Basin	Bonneville Environmental Foundation (e), Colorado River Indian Tribes, Arizona Department of Water Resources (ADWR)	Phoenix	<i>Major</i> —North America, Colorado <i>Minor</i> —Middle Gila; Lower Salt; Lower Gila/Painted Rock	Agricultural water demand reduction measures	10	2020/2020	873,211
5	Boosting water supply reliability for the Columbia Basin	Bonneville Environmental Foundation (e), Cascade Conservation District, Trout Unlimited	Quincy	<i>Major</i> —Columbia and Northwestern United States <i>Minor</i> —Lower Crab	Agricultural water demand reduction measures, Legal transactions to keep water in-stream, In-stream barrier removal, Operational efficiency measure, Wetland restoration and creation, Re-establish hydrologic connection	10	2018/2021	969,060

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6	Restoring an urban lake in India	The Nature Conservancy	Chennai	<i>Major</i> —India East Coast <i>Minor</i> —India East Coast	Wetland restoration and creation	10	2019/2021	1,642,500
7	Protecting the Edwards Aquifer in Texas	The Nature Conservancy	San Antonio	<i>Major</i> —Gulf Coast <i>Minor</i> —Medina / Upper San Antonio	Land conservation	10	2020/2020	155,419
8	Restoring oxbow wetlands in Iowa	The Nature Conservancy	Des Moines	<i>Major</i> —Mississippi-Missouri <i>Minor</i> —Middle Des Moines; North Raccoon	Wetland restoration and creation	10	2020/2022	43,560
9	Increasing groundwater retention in California	Plumas Corporation	Santa Clara	<i>Major</i> —California <i>Minor</i> —Coyote	Land cover restoration	10	2019/2021	172,690
10	Aiding Arizona's stressed Verde River	The Nature Conservancy	Phoenix	<i>Major</i> —North America, Colorado <i>Minor</i> —Middle Gila; Lower Salt; Lower Gila/Painted Rock	Operational efficiency measures	10	2020/2020	335,190
11	Controlling wetland erosion in Wyoming	US Forest Service	Cheyenne	<i>Major</i> —Mississippi-Missouri <i>Minor</i> —Crow	Land cover restoration	10	2019/2021	378,540
12	Learning from beavers to restore stream in Washington	Trout Unlimited	Quincy	<i>Major</i> —Columbia and Northwestern United States <i>Minor</i> —Lower Crab	Wetland restoration and creation	10	2020/2022	61,670
13	Providing drinking water security for villages in India	WaterAid	Hyderabad	<i>Major</i> —Krishna <i>Minor</i> —Musi / Aler	Rainwater harvesting	10	2019/2022	1,657,380

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14	Improving farm irrigation efficiency in Arizona	The Nature Conservancy	Phoenix	<i>Major</i> —North America, Colorado <i>Minor</i> —Middle Gila; Lower Salt; Lower Gila/Painted Rock	Agricultural water demand reduction measures	10	2021/2022	678,414
15	Replenishing the Lower Colorado River watershed	Bonneville Environmental Foundation (e), Gila River Indian Community	Phoenix	<i>Major</i> —North America, Colorado <i>Minor</i> —Middle Gila; Lower Salt; Lower Gila/Painted Rock	Wetland restoration and creation	10	2021/2022	1,134,803
16	Restoring water flow to the Sacramento River	Bonneville Environmental Foundation (e), Chico State Enterprises	Santa Clara	<i>Major</i> —California <i>Minor</i> —Coyote	Floodplain inundation/reestablish hydrologic connection	10	2021/2022	7,397,700
17	Conserving land above the Edwards Aquifer in Texas	Edwards Aquifer Conservancy	San Antonio	<i>Major</i> —Gulf Coast <i>Minor</i> —Medina / Upper San Antonio	Land conservation	10	2021/2021	1,906,290
18	Restoring groundwater supply in the Sacramento Valley	Freshwater Trust	Santa Clara	<i>Major</i> —California <i>Minor</i> —Coyote	Legal transactions to keep water in-stream	8	2021/2023	703,000
19	Improving irrigation efficiency in Washington	Columbia Basin Conservation District	Quincy	<i>Major</i> —Columbia and Northwestern United States <i>Minor</i> —Lower Crab	New water supply for crop irrigation	10	2021/2025	1,117,000
20	Realizing more crop per drop in Chile	Bonneville Environmental Foundation (e), Kilimo	Santiago	<i>Major</i> —North Chile, Pacific Coast <i>Minor</i> —Maipo	Agricultural water demand reduction measures	4	2022/2023	1,314,168
21	Improving aquifer storage in Texas	Edwards Aquifer Conservancy	San Antonio	<i>Major</i> —Gulf Coast <i>Minor</i> —Medina / Upper San Antonio	Legal transactions to keep water in-stream	10	2022/2023	3,564,760

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22	Restoring stream flows in Washington	Washington Water Trust	Quincy	<i>Major</i> —Columbia and Northwestern United States <i>Minor</i> —Lower Crab	In-stream barrier removal	10	2022/2025	3,090,440
23	Increasing wet meadow storage in Washington	Chelan County	Quincy	<i>Major</i> —Columbia and Northwestern United States <i>Minor</i> —Lower Crab	Wetland restoration and creation	10	2022/2024	1,997,460
24	Expanding wetland pond habitat in Wyoming	Laramie County Conservation District	Cheyenne	<i>Major</i> —Mississippi-Missouri <i>Minor</i> —Crow	Wetland restoration and creation	10	2022/2024	228,700
25	Increasing tribal farm resilience in Arizona	Bonneville Environmental Foundation (e), Colorado River Indian Tribes (CRIT), N-Drip	Phoenix	<i>Major</i> —North America, Colorado <i>Minor</i> —Middle Gila; Lower Salt; Lower Gila/Painted Rock	Agricultural water demand reduction measures	10	2022/2023	3,034,780
26	Improving farm water use efficiency in Chile	Bonneville Environmental Foundation (e), Kilimo	Santiago	<i>Major</i> —North Chile, Pacific Coast <i>Minor</i> —Maipo	Agricultural water demand reduction measures	3	2023/2023	352,500
27	Planting forests for a healthy watershed in Texas	Texas Longleaf Team	San Antonio	<i>Major</i> —Gulf Coast <i>Minor</i> —Medina / Upper San Antonio	Land cover restoration	10	2023/2025	2,081,590
28	Detecting leaks in low-income housing in Texas	Bonneville Environmental Foundation (e), Sensor Industries, Pacific Institute, local housing authorities	Irving	<i>Major</i> —Gulf Coast <i>Minor</i> —Elm Fork Trinity	Leak repair	10	2023/2023	37,850

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29	Conserving water in hospitals in Arizona	Bonneville Environmental Foundation (e), BlueCommons, City of Phoenix	Phoenix	<i>Major</i> —North America, Colorado <i>Minor</i> —Middle Gila; Lower Salt; Lower Gila/Painted Rock	Operational efficiency measures	10	2023/2023	694,620
30	Leasing water rights to sustain the Lower Colorado River Basin	Bonneville Environmental Foundation (e), BlueCommons, Restauremos El Colorado	Phoenix	<i>Major</i> —North America, Colorado <i>Minor</i> —Middle Gila; Lower Salt; Lower Gila/Painted Rock	Agricultural water demand reduction measures	10	2023/2023	986,780
31	Rehabilitating a community wastewater treatment plant in Chile	Fundación Chile	Santiago	<i>Major</i> —North Chile, Pacific Coast <i>Minor</i> —Maipo	Wastewater treatment plants	10	2023/2025	1,069,890
32	Creating oxbow lakes for aquifer recharge in Chile	Fundación Chile	Santiago	<i>Major</i> —North Chile, Pacific Coast <i>Minor</i> —Maipo	Wetland restoration and creation	10	2023/2024	199,000
33	Installing infiltration ditches for aquifer recharge in Chile	Fundación Chile	Santiago	<i>Major</i> —North Chile, Pacific Coast <i>Minor</i> —Maipo	Wetland restoration and creation	10	2023/2025	159,200
34	Implementing water sharing agreements in New Mexico	The Nature Conservancy	Phoenix	<i>Major</i> —North America, Colorado <i>Minor</i> —Middle Gila; Lower Salt; Lower Gila/Painted Rock	Legal transactions to keep water in-stream	9	2023/2024	2,903,931
35	Restoring wetlands in Qiandao Lake, China	The Nature Conservancy	Shanghai	<i>Major</i> —China Coast <i>Minor</i> —Lake Tail Hu	Agricultural best management practices	8	2023/2024	1,008,000

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36	Improving water quality in China's Lake Taihu watershed	The Nature Conservancy	Shanghai	<i>Major</i> —China Coast <i>Minor</i> —Lake Tail Hu	Constructed wetland treatment systems	8	2023/2024	1,400,000
37	Driving holistic wetland restoration in Chile	The Nature Conservancy	Santiago	<i>Major</i> —North Chile, Pacific Coast <i>Minor</i> —Maipo	Wetland restoration and creation	3	2023/2024	27,999
38	Clearing water-intensive invasive plants in South Africa	The Nature Conservancy	Cape Town	<i>Major</i> —South Africa, West Coast <i>Minor</i> —Groot Berg	Land cover restoration	8	2023/2025	457,660
39	Using AI-enabled acoustic leak analysis to reduce water loss in London	FIDO	London	<i>Major</i> —England and Wales <i>Minor</i> —Thames 1; Colne	Leak repair	10	2023/2024	<u>2,081,643</u> # (f)
40	Restoring streams in Washington with human-made beaver dams	Trout Unlimited	Quincy	<i>Major</i> —Columbia and Northwestern United States <i>Minor</i> —Lower Crab	Wetland restoration and creation	10	2023/2025	24,545
41	Restoring traditional agriculture to save Lake Xochimilco in Mexico	Conservation International	Mexico City	<i>Major</i> —Rio Verde <i>Minor</i> —Moctezuma	Wetland restoration and creation	10	2023/2026	3,858,510
42	Improving water quality for Shanghai, China	Conservation International	Shanghai	<i>Major</i> —China Coast <i>Minor</i> —Lake Tail Hu	Agricultural best management practices	10	2023/2026	950,000
43	Conserving freshwater ecosystems in São Paulo, Brazil	Conservation International	Campinas	<i>Major</i> —La Plata <i>Minor</i> —Tiete 2	Wetland restoration and creation	10	2023/2026	2,707,200

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44	Enhancing the availability of groundwater in India	WaterAid	Hyderabad	<i>Major</i> —Krishna <i>Minor</i> —Musi / Aler	Rainwater harvesting and groundwater recharge	10	2023/2026	4,446,900
45	Creating new wetlands to serve people and nature in London	Bonneville Environmental Foundation (e), Thames21	London	<i>Major</i> —England and Wales <i>Minor</i> —Thames 1; Colne	Wetland restoration and creation	10	2023/2025	306,000
46	Using AI-enabled leak detection to reduce water loss in Mexico	FIDO	Querétaro	<i>Major</i> —Rio Lerma <i>Minor</i> —Laja	Leak repair	10	2023/2024	<u>73,468</u> # (f)
47	Using AI enabled acoustic leak analysis to reduce water loss in Phoenix	FIDO	Phoenix	<i>Major</i> —North America, Colorado <i>Minor</i> —Middle Gila; Lower Salt; Lower Gila/Painted Rock	Leak repair	10	2023/2024	<u>312,302</u> # (f)
48	Reducing agricultural runoff in Iowa watersheds	Ducks Unlimited	Des Moines	<i>Major</i> —Mississippi-Missouri <i>Minor</i> —Middle Des Moines; North Raccoon	Wetland restoration and creation	10	2023/2025	1,404,980
49	Protecting birds through wetland restoration in Spain	Bonneville Environmental Foundation (e), Fundación Global Nature (FGN)	Madrid	<i>Major</i> —Tagus <i>Minor</i> —Tagus 2	Wetland restoration and creation	10	2023/2024	375,000
50	Improving water supply reliability in Mexico	Bonneville Environmental Foundation (e), Kilimo	Queretaro	<i>Major</i> - Rio Lerma <i>Minor</i> - Laja	Agricultural water demand reduction measures	3	2024/2024	360,000

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51	Enhancing wetland management and water quality in Texas	Ducks Unlimited	Irving	<i>Major</i> - Gulf Coast <i>Minor</i> - Upper Trinity River Basin	Wetland restoration and creation	10	2024/2025	610,200
52	Improving water quality in Iowa by restoring streams	The Nature Conservancy	Des Moines	<i>Major</i> - Mississippi - Missouri <i>Minor</i> - Middle Des Moines; North Raccoon	Wetland restoration and creation	10	2024/2026	110,000
53	Rejuvenating Handenahalli Lake in Bengaluru, India	CLEAN International	Bangalore	<i>Major</i> - India East Coast <i>Minor</i> - Ponnaivar	Wetland restoration and creation	10	2024/2025	2,063,900
54	Improving agricultural water use efficiency in Mexico	Agua Segura	Queretaro	<i>Major</i> - Rio Lerma <i>Minor</i> - Laja	Agricultural water demand reduction measures	8	2024/2025	1,575,000
55	Restoring critical stream flows in Washington	Bonneville Environmental Foundation (e), Chelan County, Washington Water Trust, Yakama Nation	Quincy	<i>Major</i> - Wenatchee River Basin <i>Minor</i> - Icicle Creek	In-stream barrier removal	10	2024/2027	2,059,990
56	Using AI to improve agricultural water use in Spain	Agua Segura	Madrid	<i>Major</i> - Tagus <i>Minor</i> - Tagus 2	Agricultural water demand reduction measures	7	2024/2025	700,378
57	Restoring critical watersheds in Puerto Rico	The Nature Conservancy	Guaynabo	<i>Major</i> - Caribbean <i>Minor</i> - Yabucoa / Humacao	Land cover restoration	10	2024/2027	2,973,280

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58	Using AI-enabled acoustic leak analysis to reduce water loss in Las Vegas	FIDO	Phoenix	<i>Major</i> - North America, Colorado <i>Minor</i> - Middle Gila; Lower Salt; Lower Gila/Painted Rock	Leak repair	10	2024/2025	TBD (g)
59	Promoting water stewardship in Beijing	The Nature Conservancy	Beijing	<i>Major</i> - Ziya He, Interior <i>Minor</i> - Bai He; Guangting Shuiku	Agricultural best management practices	10	2024/2025	2,700,000
60	Transforming fish farms into restored wetlands in Israel	American Society for the Protection of Nature in Israel (SPNI)	Herzliya	<i>Major</i> - Taninim Basin <i>Minor</i> - Israel Coast, West Bank	Wetland restoration and creation	10	2024/2025	557,000
61	Using human-made beaver dams to restore watersheds in Wyoming	Trout Unlimited	Cheyenne	<i>Major</i> - Colorado River Basin <i>Minor</i> - Little Snake Watershed	Wetland restoration and creation	10	2024/2026	460,900
62	Using AI to make the most of water in a Bengaluru hospital	FluxGen	Bangalore	<i>Major</i> - India East Coast <i>Minor</i> - Ponnaivar	Operational efficiency measures	7	2024/2025	712,649
63	Restoring streams and meadows in Arizona	Trout Unlimited	Phoenix	<i>Major</i> - Colorado River Basin/Salt River Basin <i>Minor</i> - Black River Basin	Land cover restoration	10	2024/2026	1,235,630
64	Optimizing water use with AI at St. Martha's Hospital, Bengaluru	FluxGen	Bangalore	<i>Major</i> - India East Coast <i>Minor</i> - Ponnaivar	Operational efficiency measures	7	2024/2025	734,860
65	Reducing water loss in Madrid through acoustic leak detection	Aganova	Madrid	<i>Major</i> - Tagus <i>Minor</i> - Tagus 2; Sorbe River	Leak repair	5	2024/2025	TBD (g)

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66	Incentivizing water saving irrigation practices in Texas	Edwards Aquifer Conservancy	San Antonio	<i>Major</i> - Gulf Coast <i>Minor</i> - San Antonio River Basin, Southern Segment of the Edwards Aquifer	Agricultural water demand reduction measures	10	2024/2026	2,642,550
67	Using drip irrigation to better manage farm water in Arizona	Bonneville Environmental Foundation (e), Environmental Defense Fund, Bridgestone, Inc., University of Arizona, Tempe Farming Inc./Todd Thelander	Phoenix	<i>Major</i> - North America, Colorado <i>Minor</i> - Middle Gila	Agricultural water demand reduction measures	6	2024/2025	384,846
68	Improving water supply reliability in Fort Worth, Texas	Bonneville Environmental Foundation (e), Tarrant Regional Water District, City of Fort Worth	Irving	<i>Major</i> - Gulf Coast <i>Minor</i> - Lower West Fork Trinity	Water reuse	10	2024/2029	3,070,270
69	Transforming irrigation in Washington's Columbia Basin	Bonneville Environmental Foundation (e), Columbia Basin Conservation District (CBCD)	Quincy	<i>Major</i> - Columbia River Basin <i>Minor</i> - Crab Creek	Agricultural water demand reduction measures	9	2024/2026	7,015,428
70	Bringing Pune's lakes back to life	CLEAN International	Pune	<i>Major</i> - Krishna <i>Minor</i> - Ghod / Nira / Bhima / Man	Wetland restoration and creation	10	2024/2026	12,939,820
71	Transforming sugarcane into lifesaving water in India	Botanical Water Technologies	Nagpur	<i>Major</i> - Godavari <i>Minor</i> - Kanhan	Water reuse	3	2024/2025	180,000

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72	Replenishing groundwater in Bengaluru, India	WaterAid	Bangalore	<i>Major</i> - India East Coast <i>Minor</i> - Ponnaivar	Rainwater harvesting and groundwater recharge	10	2024/2026	2,208,765
73	Improving groundwater recharge in Rangareddy, India	WaterAid	Hyderabad	<i>Major</i> - Krishna <i>Minor</i> - Musi	Rainwater harvesting and groundwater recharge	10	2024/2026	3,473,561
74	Harvesting rooftop rainwater at a school in Amsterdam	Wavin Nederland	Amsterdam	<i>Major</i> - Rhine <i>Minor</i> - Zuiderzee; Oude Rijn	Rainwater harvesting	10	2024/2025	10,070
75	Revolutionizing park irrigation in Australia	SWAN Systems	Sydney	<i>Major</i> - Australia, East Coast <i>Minor</i> - Sydney Coast / Georges; Hawkesbury	Operational efficiency measures	10	2024/2025	1,120,000
76	Transforming water management in Brazil	Wavin Brazil	Campinas	<i>Major</i> - La Plata <i>Minor</i> - Tiete 2; Piracicaba	Operational efficiency measures	10	2024/2025	TBD (g)

Footnotes:

(a) VWBA—Volumetric Water Benefit Accounting; the activity classification is based on [Volumetric Water Benefit Accounting \(VWBA\) methodology](#). Classification may change based on third-party quantification.

(b) Benefit duration is based on third-party quantification, where applicable. While for some of the projects, the actual benefit duration can be much longer than reported in this table, considering the various environmental/social factors that may affect the longevity of a project, we claim the benefits only for the duration for which we have assurance from implementation parties (usually 10 years, unless suggested otherwise in third-party quantification).

(c) Volumes included in the table are estimates over the duration of the projects, except when indicated with the symbol #; in those cases, the volume included is the annual volume third-party quantified for FY24. Estimated volumetric benefits have been quantified by a third-party for projects that have been operational for at least a year.

(d) Retired projects are those for which the benefit duration is over, and we are no longer claiming the benefits.

(e) Project scoping partner

(f) Volumes included in the table are the third-party quantified volume of the first year of operation only. These are first-of-their-kind leak detection projects, with large volumes and potential future variation. For other projects in the table, the estimated volume included is over the entire duration of the project.

(g) These are leak detection projects with large potential variation in volumetric benefit depending on the number and size of leaks identified. As such, we are waiting until we have validated benefits from the first year of the projects before sharing estimated annual volumetric benefits.

Overview of water replenishment projects

1. Ducks Unlimited: Improving water quality in Iowa

In partnership with the Iowa Department of Agriculture and Land Stewardship (IDALS), Ducks Unlimited restored three sites in Des Moines, Iowa through the Conservation Reserve Enhancement Program, a federal-state program between IDALS and the US Department of Agriculture. Through this project, Microsoft supported the establishment of three conservation easements totaling 91 acres and 34 acres of wetlands. These wetlands will reduce nitrogen from 1,664 acres of agricultural land, and each year will remove more than 17,470 tons of nitrogen from the drainage tile in the watershed.

2. Audubon Great Plains: Restoring North Dakota's prairie wetlands

The Urban Woods and Prairies (UWP) Initiative is a partnership between Audubon Great Plains and multiple local landowning entities aimed at restoring and enhancing riparian grassland, wetland, and woodland habitats in the Saskatchewan-Nelson basin, located in the Fargo-Moorland area of North Dakota. Many UWP sites contain small wetlands that provide some of the only filtration and storage of water in the area. Through the UWP Initiative, prairie sites are restored with native vegetation, positively affecting water storage and filtration. Microsoft also supported the Heritage Hills Park Restoration, the Oakport Wetland Restoration, and a re-vegetation volunteer event in the Fargo area.

3. Bonneville Environmental Foundation^(e), Gila River Water Storage: Bringing renewable water supplies to central Arizona

In partnership with Bonneville Environmental Foundation, this project supports Gila River Water Storage (GRWS), created by the Gila River Indian Community and Salt River Project, to address mounting challenges to secure dependable, renewable water supplies in central Arizona. GRWS provides 5 million acre-feet of reliable, renewable water supplies to residential, industrial, and municipal users. Microsoft purchased long-term storage credits from GRWS and donated them to the cities of Goodyear and El Mirage.

4. Bonneville Environmental Foundation^(e), Colorado River Indian Tribes, Arizona Department of Water Resources: Improving water security for the Lower Colorado River Basin

In partnership with Bonneville Environmental Foundation and supporting Arizona's Drought Contingency Plan, this project compensates the Colorado River Indian Tribes (CRIT) with lands along the Lower Colorado River for up to 150,000 acre-feet of water saved—helping reduce demand and stabilize Lake Mead water levels. In exchange for monetary compensation from stakeholders, including Microsoft, the CRIT pledged to forgo irrigation water deliveries and fallow approximately 10,000 acres of farmland, contributing to an approximately two-foot increase in lake depth and helping shore up water supplies for Lake Mead and the Lower Colorado River Basin.

5. Bonneville Environmental Foundation^(e), Cascade Conservation District, Trout Unlimited: Boosting water supply reliability for the Columbia Basin

Bonneville Environmental Foundation partnered with several organizations, including Cascade Conservation District, Trout Unlimited, and Microsoft, on three water restoration projects that collectively replenish an estimated 25.6 million gallons of water annually in the Columbia River Basin in central Washington. One project removed two diversions from Roaring Creek, improving irrigation efficiency and reliability while also improving habitat for several ESA-listed salmon and trout species. An aquatic habitat restoration project in the Wenatchee and Entiat sub-basins is installing up to 60 beaver dam analogs, which help mitigate against destructive effects of flooding, drought, and wildfire. And another project in the Wenatchee and Entiat sub-basins helps improve water use in pear orchards through irrigation upgrades and efficiency strategies.

6. The Nature Conservancy: Restoring an urban lake in India

The Nature Conservancy India is restoring Sembakkam Lake in Chennai, India, to help improve water quality, storage capacity, and groundwater recharge potential in the surrounding areas. The restoration includes establishing an in-situ nature-based wastewater treatment system at the lake using a constructed wetland system that will treat 6 to 7 million liters of wastewater entering the lake per day. Supported by Microsoft, the project will also lead to improved biodiversity habitat and build a connection between community and the wetland by creating a waterfront that offers a natural recreation place.

7. The Nature Conservancy: Protecting the Edwards Aquifer in Texas

The Cibolo Bluffs Nature Preserve, located near San Antonio, Texas, was established by The Nature Conservancy to help protect the Edwards Aquifer, an essential water source for over 2 million central Texans. In 2014, The Nature Conservancy expanded the preserve by acquiring a 1,521-acre tract of land located within the Edwards Aquifer recharge zone, further protecting flows into the aquifer. The land is now owned and managed

by The Nature Conservancy as part of the permanently protected nature preserve. Funding from Microsoft was used to help pay off the \$2.8 million Land Preservation Fund loan for the newly acquired land, guaranteeing the ongoing protection and ecological health of the Cibolo Bluffs Nature Preserve.

8. The Nature Conservancy: Restoring oxbow wetlands in Iowa

The Nature Conservancy and its partners are working to improve the hydrology, biodiversity, and quality of the Boone River watershed north of Des Moines, Iowa. This work includes restoring oxbows, former stream meanders cut off from the main flow of water. Oxbows can absorb flooding, filter out nitrates from agricultural runoff, and provide valuable habitat for wildlife such as the endangered Topeka shiner minnow. This project is restoring 10 oxbows and will create a restoration toolkit and training for other conservation providers across the state. Benefits include reducing flood risk and improving drinking water quality for downstream communities in the Greater Des Moines metro area and beyond.

9. Plumas Corporation: Increasing groundwater retention in California

With support from Microsoft, Plumas Corporation is restoring the channel-floodplain connectivity within East Creek meadow, part of the 7,500-acre Mountain Meadows complex in Lassen County, California, at the headwaters of the North Fork Feather River. By mostly filling the creek's main channel and two side channels, this project allows spring runoff to spread out over the surface of the meadow, increasing groundwater retention and reducing the effects of flooding and erosion. Increasing the environmental water will help maintain healthy ecosystems and is expected to improve species richness, increasing native riparian vegetation and fauna that depend on the meadow habitat.

10. The Nature Conservancy: Aiding Arizona's stressed Verde River

The Nature Conservancy is reducing the amount of water diverted from the highly stressed Verde River in Arizona, enhancing river flows and supporting fish and wildlife habitat. This project involved the installation of 2,650 feet of HDPE pipe in the leakiest section of Eureka Ditch, an eight-mile earthen irrigation ditch that serves 375 acres in the Verde Valley. As a result of this piping project, water is more efficiently conveyed to farms and diversions from the Verde River are reduced.

11. US Forest Service: Controlling wetland erosion in Wyoming

This US Forest Service project was designed to decrease erosion and sedimentation to better protect sensitive wetland habitats and watersheds downstream of the Pole Mountain Area, a 55,000-acre high elevation recreation area located in the Medicine Bow-Routt National Forest of

southeastern Wyoming. The US Forest Service and National Forest Foundation contractors and partners removed and decommissioned several road segments, restoring the acres by reseeding with native seed mix, hand-planting trees, and placing erosion control matting and straw mulch.

12. Trout Unlimited: Learning from beavers to restore streams in Washington

Trout Unlimited, in partnership with Microsoft, the US Fish and Wildlife Service, and the Natural Resource Conservation Service, is building and installing low-tech restoration structures, including beaver dam analogs and post-assisted log structures, at two primary sites in Rock Island Creek in Douglas County, Washington. Each structure will increase wetland area and groundwater infiltration in the area behind each structure. Trout Unlimited estimates approximately 0.8 acre-feet per year of total water benefits associated with increased infiltration from the construction of the 24 structures. The enhancements will increase habitat and benefit a variety of native fish, wildlife, and vegetation, especially Upper Columbia summer steelhead trout and greater sage-grouse.

13. WaterAid: Providing drinking water security for villages in India

WaterAid enhanced the availability of safe drinking water year-round in water-scarce Gulbarga and Raichur districts in India. Partnering with 30 villages in the districts, WaterAid demonstrated solutions to ensure community-led drinking water security through groundwater recharge and effective management of available water sources. The project included building rainwater harvesting and groundwater recharge structures and restoring additional drinking water sources, such as dug wells, to enhance water sustainability, as well as a pilot on managed aquifer recharge. Additional training of village councils and individuals helped to inform and guide the local administration in future groundwater replenishment efforts.

14. The Nature Conservancy: Improving farm irrigation efficiency in Arizona

The Nature Conservancy is working with the Yavapai-Apache Nation (YAN) to improve its agricultural irrigation efficiency in the Verde Valley of central Arizona. With support from Microsoft, the project is installing a 30-acre center pivot irrigation system on the YAN's Upper Cloverleaf Fields. Replacing the inefficient flood irrigation method with a center pivot will reduce water use by nearly 25%, helping to preserve flows for municipal water supplies in the Phoenix area. The irrigation infrastructure improvements will also help the success of the YAN's agricultural operations, improving sustainability in their water use and allowing them to produce crops more efficiently.

15. Bonneville Environmental Foundation^(e), Gila River Indian Community: Replenishing the Lower Colorado River watershed

Bonneville Environmental Foundation and Microsoft are partnering with the Gila River Indian Community (GRIC) in central Arizona on water replenishment in the Lower Colorado River watershed. GRIC has developed managed aquifer recharge (MAR) sites to achieve riparian restoration, wetland habitat, and aquifer recharge benefits on the Community's Reservation. The project delivered 1,000 acre-feet of Central Arizona Project water to GRIC's MAR 1B site. The water recharged at the MAR sites generates long term storage credits which GRIC is able to retire, ensuring that the water would benefit the aquifer.

16. Bonneville Environmental Foundation^(e), Chico State Enterprises: Restoring water flow to the Sacramento River

Bonneville Environmental Foundation and Microsoft are partnering with Chico State Enterprises (CSE), a non-profit auxiliary of California State University, which designates and implements habitat restoration projects on the Sacramento River and its tributaries. CSE collaborates with the Sacramento River Forum and the US Bureau of Reclamation to restore spawning and rearing habitat through the Upper Sacramento River Anadromous Fish Habitat Restoration Program. The primary objective of this project is to restore flow to the East Sand Slough side channel of the Sacramento River by excavating the current channel. Excavation will allow for the channel to be inundated even under the Shasta Dam winter low flow regime, forming habitat for critically endangered winter run Chinook salmon juveniles during rearing.

17. Edwards Aquifer Conservancy: Conserving land above the Edwards Aquifer in Texas

The Edwards Aquifer Conservancy works to protect and enhance historic recharge of the Edwards Aquifer, the primary water source for residential, agricultural, commercial, and industrial use in eight counties of south-central Texas. With support from Microsoft, the project is acquiring conservation easements over 1,186 acres within the Edwards Aquifer recharge zone, with a targeted emphasis on lands that are most likely threatened by rapid development or negative management practices. This acquisition will protect, on average, 0.6 acre-feet of recharge per acre protected, with the potential to increase average recharge rates over time through the establishment of beneficial land management practices.

18. Freshwater Trust: Restoring groundwater supply in the Sacramento Valley

The Freshwater Trust and Upstream Tech have analyzed groundwater recharge opportunities in California's Sacramento Valley to help improve groundwater challenges. The Freshwater Trust will enter into an agreement with one or more local agricultural water users to achieve water replenishment, through distributed agricultural practices that augment surface or groundwater supply and/or reduce surface or groundwater demand. Project types include Managed Aquifer Recharge (MAR), Water Use Efficiency (WUE), and Cropland Repurposing projects. 19. Columbia Basin Conservation District: Improving irrigation efficiency in Washington

The Columbia Basin Conservation District is planning, designing, and implementing irrigation infrastructure in the Columbia River Basin of central Washington. Farmers in the Odessa subarea are currently relying on a rapidly declining aquifer with poor water quality making it not only expensive but also threatening reliable irrigation water for approximately 80,000 acres. The Odessa Groundwater Replacement Program, when completed, will deliver surface water from the Columbia River replacing the existing unsustainable groundwater source. In addition to conserving 240,000 acre-feet of groundwater from withdrawals annually, the project will provide a 10% increase in irrigation efficiency, reliable groundwater to municipal and industrial users, and will help the region become more water resilient.

20. Bonneville Environmental Foundation^(e), Kilimo: Realizing more crop per drop in Chile

With support from a partnership between Bonneville Environmental Foundation and Microsoft, Kilimo is engaging with local farmers in the Maipo Basin near Santiago, Chile, to improve their water use efficiency. Kilimo supplies precision agriculture technology that supports real-time moisture and irrigation management for farmers with high-value crops. The project will decrease the amount of water pumped or diverted to irrigate those farms, conserving use in the watershed of Santiago.

21. Edwards Aquifer Conservancy: Improving aquifer storage in Texas

Under the auspices of the Edwards Aquifer Authority, the Edwards Aquifer Conservancy (EAC) works to protect and enhance historic recharge of the Edwards Aquifer, the primary water source for residential, agricultural, commercial, and industrial use in eight counties of south-central Texas. In partnership with Microsoft, the EAC is leasing groundwater rights to forbear pumping of 400 acre-feet annually for 10 years. This project enhances San Antonio's water resilience by improving springflow and aquifer storage and benefits freshwater ecosystems associated with the aquifer.

22. Washington Water Trust: Restoring stream flows in Washington

Together with Washington Water Trust, Microsoft is supporting restoration of critical stream flows in Icicle Creek, a priority tributary to the Wenatchee River in central Washington. Washington Water Trust is working with Cascade Orchards Irrigation Company to modernize their delivery system with a new intake point, pumping facilities, and buried pipelines replacing an open-ditch network. The project will restore 2,698 acre-feet of permanent annual flow to Icicle Creek, a top-tier restoration priority for threatened salmon and steelhead populations and help improve sustainability at the Leavenworth National Fish Hatchery.

23. Chelan County: Increasing wet meadow storage in Washington

The Chelan County Natural Resource Department is partnering with Microsoft to restore the hydrologic function of Camas Meadows, located in the Wenatchee River watershed in north-central Washington. This meadow habitat has lost much of its natural water storage capacity due to various historical human activities such as channel incision and livestock grazing. This project restores the natural processes that form and maintain seasonally wet meadow habitat that supports sensitive plant species, provides water storage and delivery of cold water to downstream areas at critical periods in the water year, and is resilient to disturbances from a changing climate. Camas Meadows is critical habitat to two state and federally endangered plant species: the Wenatchee Mountains checkermallow and the Wenatchee larkspur.

24. Laramie County Conservation District: Expanding wetland pond habitat in Wyoming

With support from Microsoft, the Laramie County Conservation District is improving the drainage capability of Dry Creek in Cheyenne, Wyoming. By enlarging an existing shallow wetland pond in the Cheyenne Business Park Natural Area, the project increases the pond's capacity for holding erosive stormwater runoff and capturing sediments and urban pollutants. Benefits from the project include improved water quality and carbon sequestration, aquatic and riparian habitat improvements, and more recreational opportunities.

25. Bonneville Environmental Foundation^(e), Colorado River Indian Tribes (CRIT), N-Drip: Increasing tribal farm resilience in Arizona

In collaboration with Bonneville Environmental Foundation and Microsoft, the Colorado River Indian Tribes (CRIT) and N-Drip are installing precision drip irrigation on 1,600 acres of CRIT agricultural land along the lower Colorado River in Arizona. Compared to conventional flood irrigation, drip irrigation is a very efficient method that provides a slow-moving supply of water directly to the soil, significantly reducing evaporation and runoff. By assisting CRIT with conversion to drip irrigation, this project will increase resilience for tribal farm operations while improving surface water management and storage and improving climate adaptation and sustainability.

26. Bonneville Environmental Foundation^(e), Kilimo: Improving farm water use efficiency in Chile

With support from a partnership between Bonneville Environmental Foundation and Microsoft, Kilimo is engaging with local farmers in the Maipo Basin near Santiago, Chile, to improve their water use efficiency. Expanding upon an existing drip irrigation project with Kilimo, this project will support the use of AI and site-specific data to improve irrigation management on 200 hectares per year of private irrigated family farms. The system can provide tailored irrigation schedules for a variety of high-value crops, helping farmers to decrease groundwater pumping and diversion of surface water.

27. Texas Longleaf Team: Planting forests for a healthy watershed in Texas

The Texas Longleaf Team partnered with Texan by Nature to restore longleaf pine forest in the Trinity River Basin in Texas. The native longleaf pine is essential to the ecosystem of East Texas because it filters and stores freshwater, sequesters carbon, supports biodiversity, and benefits the community. This project uses strategic land management with invasive brush species removal and prescribed fire to restore 2,000 acres of longleaf pine ecosystem to optimal condition. Additionally, approximately 100,000 longleaf pine seedlings will be planted, and a diverse understory of plants will be seeded and developed.

28. Bonneville Environmental Foundation^(e), Sensor Industries, Pacific Institute, and local housing authorities: Detecting leaks in low-income housing in Texas

, Bonneville Environmental Foundation is working to improve water resiliency in the Dallas-Fort Worth area, Texas. A partnership between the Foundation's Business for Water Stewardship, Sensor Industries, Pacific Institute, and local housing authorities is installing 441 leak detection sensors for toilets in multi-family, low-income housing developments. The sensors have a 10-year lifetime and will allow for real-time monitoring of leaks, enabling prompt response from maintenance to minimize water loss.

29. Bonneville Environmental Foundation^(e), BlueCommons, and the City of Phoenix: Conserving water in hospitals in Arizona

Bonneville Environmental Foundation is partnering with BlueCommons and the City of Phoenix to conserve water in the Phoenix, Arizona metro area. For health and safety reasons, hospitals have "hardened demand" for water, meaning they are unable to quickly reduce their need for water even in shortage conditions. BlueCommons is providing revolving loans to hospitals in Phoenix to cover the cost of retrofitting industrial cooling systems. The upgraded systems will significantly reduce water use and costs for the hospitals, supporting municipal water conservation efforts in Arizona in the face of continued water shortage in the Lower Colorado River Basin.

30. Bonneville Environmental Foundation^(e), BlueCommons, Restauremos El Colorado: Leasing water rights to sustain the Lower Colorado River Basin

Bonneville Environmental Foundation is partnering with organizations including BlueCommons and Restauremos El Colorado on its Lower Colorado River Resilience project to conserve water in Lake Mead and support water resilience in Arizona and the Lower Colorado River Basin. The project includes a revolving suite of interventions that bring together water leasing, habitat restoration, environmental flows, and private and public sector investment to increase water resilience in the Lower Colorado River. The initial phase aims to secure over 10,000 acre-feet of water for

Lake Mead within three years through leases with water rights holders. This project will help maintain necessary reservoir levels in Lake Mead in the near term while laying the foundation for long-term resilience solutions.

31. Fundación Chile: Rehabilitating a community wastewater treatment plant in Chile

Fundación Chile is partnering with the municipality of Curacaví to improve water sustainability and resiliency in the Maipo River Basin near Santiago, Chile. This project is rehabilitating a system to treat effluent, liquid waste or sewage, from the Curacaví community wastewater treatment plant, which is not meeting legislative standards. The rehabilitated system will produce treated water with sufficient quality for safe use by farmers, ranchers, and the area's ecosystem. This project will increase available water in this highly stressed location, aid in ecological conservation, and serve as a replicable project that can be adopted in other parts of Chile.

32. Fundación Chile: Creating oxbow lakes for aquifer recharge in Chile

Fundación Chile is partnering with the municipality of Maipú and University of Chile in the Maipo River Basin near Santiago, Chile to create oxbow lakes in strategic topographic areas particularly exposed to flooding. The lakes will prevent the immediate loss of water either by runoff or evaporation, improving the recharge of the Maipo aquifer, which supports drinking water for more than 670,000 people. By facilitating the collection, storage, and infiltration of rainwater, this project improves water supply and ecosystem services and helps increase biodiversity.

33. Fundación Chile: Installing infiltration ditches for aquifer recharge in Chile

Fundación Chile is partnering with the municipality of Maipú and University of Chile in the Maipo River Basin near Santiago, Chile to install infiltration ditches in strategic topographic areas particularly exposed to flooding, recharging the Maipo aquifer with the collected water. This project avoids the mechanical dragging effect of rainwater that can affect growing crops, reducing soil loss due to erosion. It helps to control loss of water, establish native vegetation, and above all allow for additional infiltration of water into local aquifer systems that supply more than 670,000 people with drinking water.

34. The Nature Conservancy: Implementing water sharing agreements in New Mexico

The Nature Conservancy is partnering with the Jicarilla Apache Nation and the New Mexico Interstate Stream Commission (NMISC) to benefit threatened and endangered fish and increase water security on the San Juan River in New Mexico. The Nature Conservancy worked with its partners to design and implement a first-of-its kind water sharing agreement that allows the NMISC to lease up to 20,000 acre-feet of water per year from the Nation to benefit threatened, endangered, and sensitive fish species and increase water security for New Mexico. This project

demonstrates that Tribal water sharing agreements can enhance the economic and social resilience of Tribal communities, help resolve water scarcity in the Colorado River Basin and improve the health of the San Juan River. Water contracted by the NMISC under the agreement will be used in the New Mexico Strategic Water Reserve (which allows for ecological and compact compliance uses) and will be released from Navajo Reservoir into the San Juan River.

35. The Nature Conservancy: Restoring wetlands in Qiandao Lake, China

The Nature Conservancy launched the Qiandao Lake Water Fund in 2018 to provide systematic solutions for water stress of Qiandao Lake in Zhejiang Province, China. The Nature Conservancy is collaborating with the local community, NGOs, and research institutes to establish inlet-lake wetland restoration pilot sites and to explore nature-modelling restoration methods, laying the foundation for large-scale application. The project promotes agricultural best management practices targeting non-point source pollution (from pesticides/herbicides and fertilizers) and soil erosion through the three most widely cultivated crops—hickory, tea, and citrus. Additionally, up to two hectares of wetland treatment systems are being restored and constructed in one key sub-watershed of Qiandao Lake.

36. The Nature Conservancy: Improving water quality in China's Lake Taihu watershed

The Nature Conservancy is promoting water stewardship in China's Lake Taihu watershed by developing source water pollutant reduction and wetland systems interception approaches. These approaches include implementing regenerative agriculture practices and constructing eco-buffering infrastructure such as wetlands, which help control non-point source pollution and runoff in rural farming areas. Long term, the project will systematically improve water quality, the aquatic ecosystem, biodiversity, and ecology by scaling up agricultural management best practices and eco-buffering infrastructure.

37. The Nature Conservancy: Driving holistic wetland restoration in Chile

The Nature Conservancy is partnering with key stakeholders in Chile to drive a holistic effort for water sustainability in the Maipo River Basin and High Andean wetlands around Santiago. This project includes on-the-ground wetland conservation efforts and the promotion of public policy to protect these key ecosystems to strengthen collective action and drive scientific research. Working with local organizations and scientific partners, The Nature Conservancy will select 30 hectares of wetlands to conduct scientific studies and restoration activities as a demonstration project. From this project, The Nature Conservancy will develop the best practices handbook to share among landowners, encouraging engagement in conservation activities and long-term management.

38. The Nature Conservancy: Clearing water-intensive invasive plants in South Africa

The Nature Conservancy partnered with CapeNature and the City of Cape Town to create the Greater Cape Town Water Fund, which aims to restore biodiversity and secure the long-term water supply for people and nature in the greater Cape Town region of South Africa. A key goal of the Fund is to increase regional water supply collection by removing water-guzzling invasive plant species. As of June 2023, the project has cleared a total of 43,191 hectares: 29,822 new hectares towards the 2026 target, of which 13,369 hectares were followed up at least once. Microsoft's support will go towards clearing invasive species on 150 hectares in priority sub-catchments of the Theewaterskloof dam in the Western Cape Water Supply System.

39. FIDO: Using AI-enabled acoustic leak analysis to reduce water loss in London

Microsoft is partnering with FIDO Tech to reduce water loss from leaks in the aging water distribution network of London, England. The project uses FIDO's AI-enabled acoustic leak analysis to identify and track leaks over a distance of 350 km within the Thames Water network. Once leaks are identified, the local water utility, Thames Water, will conduct repairs. Over a 10-year period, FIDO will track volumetric benefits alongside other complementary benefits, including greenhouse gas reductions.

40. Trout Unlimited: Restoring streams in Washington with human-made beaver dams

Working with the National Resources Conservation Service and the US Fish & Wildlife Service, Trout Unlimited is expanding its watershed restoration work in Rock Island Creek in Douglas County, Washington. In partnership with Microsoft, the project is installing up to 105 beaver dam analogue structures throughout one mile of Rock Island Creek. These structures help to restore aquatic habitat, create pools and ponds, induce channel meandering, reduce channel incision, and expand floodplain and wet meadow habitat using low-tech process-based restoration practices. Beyond the habitat enhancement, an estimated range of 3-4 acre-feet of groundwater will be stored annually following implementation.

41. Conservation International: Restoring traditional agriculture to save Lake Xochimilco in Mexico

Conservation International is working to conserve and restore the Lake Xochimilco wetlands in Mexico City, Mexico. The Lake Xochimilco ecosystem is the last natural remnant of the Valley of Mexico lagoon system, which has been severely modified by urbanization, resulting in water pollution and endangering biodiversity. This project implements a model called Refugio-Chinampa, designed to protect this ecosystem through various conservation measures, such as restoration of the traditional *chinampa* wetland agricultural technique, planting of native species, and employing biofilters to improve water quality. The Xochimilco wetland is home to 5% of Mexico's described species—including the endemic Mexican axolotl salamander, an emblematic critically endangered amphibian species. Already in effect for five years, the project is expanding its reach through support from Microsoft to incorporate more local farmers and a larger wetland restoration area.

42. Conservation International: Improving water quality for Shanghai, China

Built to control, retain, and store freshwater from the Huangpu River, the Jinze Reservoir on Shanghai's western edge is facing challenges in pollution from agricultural activities and insufficient treatment of domestic wastewater in the surrounding area. Conservation International aims to improve Jinze Reservoir's water quality by demonstrating and promoting practical on-the-ground solutions to reduce pollution. The project's solutions include a restored, artificial wetland system that can treat 100,000 cubic meters of water annually.

43. Conservation International: Conserving freshwater ecosystems in São Paulo, Brazil

Conservation International is working to conserve and restore freshwater ecosystems in the micro-basins of Campinas, a municipality in São Paulo state, Brazil. The micro-basin is an important source of water for São Paulo but extreme drought events in recent years have significantly reduced available water in this basin. With support from Microsoft, this project involves direct improvements in public control and enforcement capacity, the creation of at least 500 hectares of new protected areas, restoration in at least 500 hectares through inputs and technical assistance, and monitoring of the areas to evaluate water and other benefits.

44. WaterAid: Enhancing the availability of groundwater in India

WaterAid is partnering with Microsoft to ensure the sustainable availability of groundwater in the Deccan region of India. This project will harvest rainwater and enhance the availability of groundwater in water-stressed regions through artificial groundwater recharge. Envisioned as a three-year program, WaterAid will scale this project into the Hyderabad district of Telangana state and expand its work in Raichur and Gulbarga districts of North Karnataka. In Hyderabad, this project will cover 25 residential welfare associations and create profound impact at the district level.

45. Bonneville Environmental Foundation^(e), Thames21: Creating new wetlands to serve people and nature in London

Bonneville Environmental Foundation and Thames21 are partnering to restore wetlands across London and the Thames River Basin in England. Thames21 is creating new wetlands in Watling Park in the London Borough of Barnet that will reconnect Burnt Oak Brook to the surrounding landscape, creating a thriving blue/green space with a network of paths that will provide opportunities for nature-connection and learning. The project helps to meet a demand for biodiverse urban green space and serves a densely populated urban area. A wetland on this site will reduce flood risk in a heavily urbanized (and highly deprived) area of London in the Silk Stream catchment.

46. FIDO: Using AI-enabled leak detection to reduce water loss in Mexico

Microsoft is partnering with FIDO Tech to reduce water loss from leaks in the aging water distribution network of Querétaro, Mexico. The project uses FIDO's AI-enabled acoustic leak analysis to identify and track leaks over a distance of 350 km within the network. Once leaks are identified, the local water utility, CEA Querétaro, will conduct repairs. Over a 10-year period, FIDO will track volumetric benefits alongside other complementary benefits, including greenhouse gas reductions.

47. FIDO: Using AI-enabled acoustic leak analysis to reduce water loss in Phoenix

Microsoft is partnering with FIDO Tech to reduce water loss from leaks in the aging water distribution network of the south metropolitan area of Phoenix, Arizona. The project uses FIDO's AI-enabled acoustic leak analysis to identify and track leaks over a distance of 350 km within the network. Once leaks are identified, the local water utility, EPCOR Water, will conduct repairs. Over a 10-year period, FIDO will track volumetric benefits alongside other complementary benefits, including greenhouse gas reductions.

48. Ducks Unlimited: Reducing agricultural runoff in Iowa's watersheds

Ducks Unlimited is working with the Iowa Department of Agriculture and Land Stewardship (IDALS) to restore water quality to wetlands in Iowa. To meet Iowa's Nutrient Reduction Strategy goal of 45% nitrate reduction in rivers and streams, IDALS estimates the need for at least 5,000 Conservation Reserve Enhancement Program (CREP) wetlands capable of treating runoff from 5–10 million acres of agricultural lands in the Des Moines Lobe. Ducks Unlimited is delivering 3–8 CREP wetlands restorations, including constructing approximately 45 to 55 acres of wetlands supporting a drainage basin of more than 6,000 acres.

49. Bonneville Environmental Foundation^(e), Fundación Global Nature (FGN): Protecting birds through wetland restoration in Spain

Bonneville Environmental Foundation and Fundación Global Nature (FGN) are partnering to restore and conserve the wetlands of Soto Gutiérrez in Ciempozuelos, Spain. This wetland is a breeding, feeding, migratory stop and sanctuary for at least 224 bird species, all of which are classified as vulnerable or in danger of extinction. The Foundation and FGN are acquiring and enhancing an 11-hectare wetland to maximize biodiversity, improve the water quality, and create public benefits. Benefits will include fencing and walkways to control access, habitat protection, and interpretive signage for public education.

50. Bonneville Environmental Foundation^(e), Kilimo: Improving water supply reliability in Mexico

With support from a partnership between Bonneville Environmental Foundation and Microsoft, Kilimo will engage with local farmers in the Rio Laja basin near Queretaro, Mexico, to improve their water use efficiency. Kilimo supplies precision agriculture technology for farmers with high-value crops. The project will support expanded applications of IoT satellite moisture and irrigation management systems on 900 hectares of private irrigated family farms to decrease water pumping and diversion for up to a 20% reduction in water withdrawal from surface and/or groundwater sources, along with decreased pumping costs for farmers and associated carbon reductions from electric power use.

51. Ducks Unlimited: Enhancing wetlands management and water quality in Texas

Since 1987, Ducks Unlimited and the Texas Parks & Wildlife Department have been working to enhance water control infrastructure in the Richland Creek Wildlife Management Area (WMA), part of the Trinity River floodplain in Freestone County, Texas. The WMA provides important water quality improvements for the Richland Chambers Reservoir and the communities that depend on it. The Wildcat Marsh enhancement project will add management capacity to 111 acres on the WMA, enabling managers to facilitate water quality enhancements in the Trinity River while expanding public recreation opportunities. Other benefits include optimizing habitat for waterfowl and alligator gar spawning.

52. The Nature Conservancy: Improving water quality in Iowa by restoring streams

The Nature Conservancy and its partners are working to improve the hydrology, biodiversity, and quality of the Boone River Watershed north of Des Moines, Iowa. This work includes restoring oxbows, former stream meanders cut off from the main flow of water, which can filter out nitrates from agricultural runoff and provide valuable habitat for wildlife. This project will restore 10 degraded oxbow wetlands in the watershed, which is expected to capture and filter an estimated 500 acres of runoff, and provide 5 acres of critical wetland habitat and 10 acres of native prairie habitat. The project directly benefits downstream communities, such as Des Moines, by reducing flood risk and improving water quality, as well as providing an out-of-stream watering source for livestock and improved recreation opportunities.

53. CLEAN International: Rejuvenating Handenahalli Lake in Bengaluru, India

CLEAN International is partnering with Microsoft to rejuvenate Handenahalli Lake in Bengaluru, India. This project aims to increase storage capacity of the lake and groundwater infiltration, thus enhancing water availability to the local community for crop irrigation and domestic purposes. This project is a part of a city-wide effort to restore local lakes, with additional support from local volunteers and Bengaluru-based environmental group SayTrees. Restoration efforts include dewatering and desilting 19 acres of Handenahalli Lake and planting 500 trees around the lake.

54. Agua Segura: Improving agricultural water use in Mexico

In partnership with local organization Nuup, Agua Segura will work to improve agricultural water use on 150 hectares in the state of Guanajuato, Mexico. Supported by Microsoft, the project involves enhancing water infrastructure in fields, helping to improve irrigation efficiency, increase crop yields, and prevent crop disease. The project will also provide technical support to farmers and recommend farm-specific irrigation improvement measures based on an assessment of current irrigation systems and baseline water use. Water use is monitored through farm visits and measurements to ensure water savings are retained over time.

55. Bonneville Environmental Foundation^(e), Washington Water Trust, Cascade Orchards Irrigation Company: Restoring critical stream flows in Washington

Bonneville Environmental Foundation is partnering with Microsoft to expand an existing restoration project for critical stream flows in Icicle Creek in Chelan, Washington. In collaboration with Washington Water Trust and Cascade Orchards Irrigation Company, this project is modernizing their delivery system with a new intake point, pumping facilities, and buried pipelines replacing an open-ditch network. The project will restore 2,698 acre-feet of permanent annual flow to Icicle Creek, contributing to the health of threatened local salmon and steelhead fish populations.

56. Agua Segura: Using AI to improve agricultural water use in Spain

In partnership with Agrow Analytics, Agua Segura will work to reduce agricultural water use on approximately 200 hectares of farmland in Madrid, Spain. Agrow Analytics' AI-based technology will use satellite, climate, soil, crop, sensor, and farm-level data to provide irrigation recommendations to help farmers reduce agricultural water use. Agrow Analytics will also engage with farmers and provide further support through monitoring and technical assistance.

57. The Nature Conservancy: Restoring critical watersheds in Puerto Rico

The Nature Conservancy is partnering to improve watershed restoration in Puerto Rico. This project will restore 1,100 hectares of the degraded Guayanes-Humacao watersheds and reduce pollutant load and sediment while improving water quality through active restoration interventions, sustainable agroforestry practices, and forest conservation. Additionally, The Nature Conservancy will plant over 60,000 native tree species as a part of this effort.

58. FIDO: Using AI-enabled acoustic leak analysis to reduce water loss in Nevada

Microsoft is partnering with FIDO Tech to reduce water loss caused by leaks in two water distribution networks in Las Vegas, Nevada. The project uses FIDO's AI-enabled acoustic leak analysis to identify and track leaks across 500 km of pipeline operated by the Las Vegas Valley Water District and the City of North Las Vegas. Once leaks are identified, the local water utility will conduct repairs. Over a 10-year period, FIDO will monitor the volumetric benefits achieved, alongside other complementary benefits, including greenhouse gas reductions.

59. The Nature Conservancy: Promoting water stewardship through regenerative agriculture in Beijing

The Nature Conservancy will oversee the implementation of regenerative agriculture practices across 1,000 hectares of winter wheat in water-stressed areas of the Ziya River basin, where conventional agriculture practices, such as deep ploughing and monocropping, resulted in a reduction in soil water retention. The project also plans to control non-point source pollution from fertilizers and domestic wastewater discharges by constructing and maintaining a small agricultural wetland. Additionally, The Nature Conservancy will establish a regenerative agriculture outreach center for farmers which will provide tools, workshops, field training, and operation manuals.

60. Society for the Protection of Nature in Israel (SPNI): Transforming fish farms into restored wetlands in Israel

The Society for the Protection of Nature in Israel (SPNI) is partnering with the Maagan Michael Kibbutz and Microsoft on a commercial fishponds rewilding effort to decommission commercial fishponds and return the surrounding land to its natural hydrology and wetland state. This project will drain and reshape the ponds, remove fish farming infrastructure, install water conveyance systems to flood the former fishponds, adjust depth, and plant indigenous vegetation. The wetland will reduce the pollution from the Taninim River and improve local biodiversity. Additionally, the project will result in a carbon reduction of 32 tons per hectare of rewilded fishponds.

61. Trout Unlimited: Using human-made beaver dams to restore watersheds in Wyoming

Trout Unlimited (TU) is partnering with the Bureau of Land Management, Wyoming Game and Fish, Wyoming Wildlife and Natural Resource Trust, the City of Cheyenne, Wyoming and Microsoft to bolster drought resilience in the Little Snake River watershed using Beaver Dam Analogs (BDAs) and post assisted log structures woven with vegetation. Over 60 BDAs will be installed throughout the 2.5 miles of stream within the Little Snake River. Each structure will slow water and spread it across the floodplain adjacent to Green River tributaries, increasing water residence time and aggrading the streambed. These structures will help restore the watershed, improving riparian health, habitat for aquatic species, and downstream sedimentation and nutrient impacts.

62. FluxGen: Using AI to make the most of water in a Bengaluru hospital

Water is often in short supply in Bengaluru, India's third-largest city—a problem of urbanization made worse by climate change. Based in Bengaluru, FluxGen is helping people to make more efficient use of the water that is available. With support from Microsoft, FluxGen's Internet of Things (IoT) and AI-based solutions are reducing water consumption for a hospital in Bengaluru. The project aims to increase the hospital's water efficiency and water availability, while reducing reliance on freshwater.

63. Trout Unlimited: Restoring streams and meadows in Arizona

Trout Unlimited (TU) is partnering with the Bureau of Reclamation, the US Forest Service, and Arizona Game and Fish Department, to restore the Thompson-Burrow Meadow and the West Fork Black River. These habitats are part of an important headwater source for the Phoenix Valley but have been degraded through wildfire impacts and past land management practice. To combat this degradation, TU will restore 2.6 miles of stream and regenerate 128 acres of wet meadow in three creeks. This will increase climate resilience and improve water quality and water storage. Downstream benefits in the Phoenix Valley include sustained water levels during dry months and reduced impacts from flooding and sedimentation.

64. FluxGen: Optimizing water use with AI at St. Martha's Hospital, Bengaluru

FluxGen's Internet of Things (IoT) and AI-based solutions are helping St. Martha's Hospital in Bengaluru, India, make the most of water. With support from Microsoft, FluxGen aims to reduce water consumption at the hospital by 50%, and early results are promising. Water decreased by up to 10% following the installation of flow meters, level sensors, piezometers, and rain gauges to monitor water flow and consumption patterns. The next phase of the project includes implementing advanced water-saving technologies such as aerators, rainwater harvesting systems, and using recycled water to further reduce consumption.

65. Aganova: Reducing water loss in Madrid through acoustic leak detection

Aganova is partnering with the Mancomunidad de Aguas del Sorbe (MAS) water utility to reduce non-revenue water (NRW) in the Province of Guadalajara and Comunidad de Madrid, Spain. Aganova will deploy its acoustic Nautilus System that will travel through 162.8 km of pipes in the water distribution network, identifying and tracking leaks, so MAS can conduct repairs. The project will help reduce overall water withdrawals and lessen regional water stress. Additionally, reduced water loss will result in carbon emissions savings, decreasing the energy requirements for water treatment and distribution.

66. Edwards Aquifer Conservancy: Incentivizing water-saving irrigation practices in Texas

The Edwards Aquifer Conservancy driving water conservation efforts by improving water efficiency among permitted Edwards Aquifer users, awarding up to 100% cost-share to groundwater permit holders who implement innovative conservation projects. The project will incentivize conversion of older inefficient irrigation methods to more efficient practices such as center pivot sprinklers and subsurface drip irrigation systems. Through this project, 4 to 6 farms will transition to more efficient irrigation systems resulting in improved supply reliability and operational savings for farmers.

67. Bonneville Environmental Foundation^(e), Environmental Defense Fund, Bridgestone Inc., University of Arizona, Tempe Farming Inc.: Using drip irrigation to better manage farm water in Arizona

Bonneville Environmental Foundation is partnering with the Environmental Defense Fund, Bridgestone Inc., University of Arizona, and Tempe Farming Inc./Todd Thelander to bring an innovative approach to irrigation of guayule crops grown for rubber production. This project will install drip irrigation technologies on up to 52 acres, which is anticipated to conserve a minimum of 52 acre-feet of water annually over the course of the drip irrigation systems' useful life. With the installation of these systems, the project will reduce water and energy consumption, reduce herbicide use, and increase rubber yield. This adoption of climate-smart agricultural practices by underserved communities can enable sustainable farming in the Southwest while bringing high-skill, high-wage jobs to the region.

68. Bonneville Environmental Foundation^(e), City of Fort Worth, Tarrant Regional Water District: Improving water supply reliability in Fort Worth, Texas

Bonneville Environmental Foundation, the city of Fort Worth, and Tarrant Regional Water District are partnering to develop an indirect potable reuse project utilizing wastewater effluent from the city of Fort Worth, Texas. The project will capture and treat wastewater effluent from the Fort Worth Mary's Creek Water Reclamation Facility. The treated water will then be mixed with additional surface water and provided to customers. This water reuse project will augment the water supply, reduce the demand for new freshwater sources, and help the region meet its water demands sustainably. The project will also protect downstream water quality by reducing the concentration of nutrients discharged into Mary's Creek and Clear Fork of the Trinity River.

69. Bonneville Environmental Foundation^(e), Columbia Basin Conservation District: Transforming irrigation in Washington's Columbia Basin

In collaboration with the Columbia Basin Conservation District (CBCD) and Microsoft, the Bonneville Environmental Foundation, is implementing a program to maximize irrigation efficiency in the mid-Columbia Basin in Washington. The program will offer cost-share to farmers for new, more efficient irrigation practices such as mobile drip irrigation systems and advanced soil moisture and climate monitoring systems that inform irrigation schedules. This project will enhance community water supply resilience by reducing agricultural water use, ultimately benefiting 25 communities within the mid-Columbia Basin.

70. CLEAN International: Bringing Pune's lakes back to life

CLEAN International, in partnership with local nonprofit organization SayTrees and Microsoft, is restoring and rejuvenating 10 lakes in Pune, India. This project will increase the storage capacity of the lakes and improve groundwater infiltration, thus enhancing water availability to the local communities of over 20,000 people. Restoration efforts include desilting the lakes, opening inlets and outlets, installing silt traps, and planting trees. In addition to water quantity benefits, the project will track biodiversity and water quality improvements through annual assessments.

71. Botanical Water Technologies: Transforming sugarcane into lifesaving water in India

Botanical Water Technologies (BWT) partnered with INNOVITIQ, Manas Agro Industries & Infrastructure, and Jankalyankari Samiti (NGO) to bring an innovative water access strategy to villages around Nagpur, India. BWT will deploy Water Harvesting Units (WHUs) to collect and treat condensate from processed sugarcane at a local sugar mill, producing 60 million liters of "botanical water" annually for a minimum of three years. This potable water will be distributed to over 16,000 residents across nearby villages, providing reliable access to safe drinking water and reducing dependence on depleted groundwater, significantly improving the quality of life for these communities.

72. WaterAid: Replenishing groundwater in Bengaluru, India

WaterAid and Microsoft have partnered to tackle water availability, accessibility, and quality issues in eight villages in rural Bengaluru, India. The project includes building water conservation structures, implementing groundwater recharge systems, and leveraging technology-driven approaches for monitoring. The initiative aims to mitigate groundwater depletion, establish sustainable water systems, and foster community ownership of water security.

73. WaterAid: Improving groundwater recharge in Rangareddy, India

WaterAid improving water availability, accessibility, and quality in 15 villages in Rangareddy, a district in India deeply impacted by critical low groundwater levels. The project involves restoring surface water conservation structures such as check dams, earthen dams, ponds, and open wells. Additionally, it includes constructing groundwater recharge systems and employing technology-driven monitoring approaches. This initiative aims to reduce groundwater depletion, establish sustainable water systems, and enhance community ownership of water security.

74. Wavin Nederland B.V.: Harvesting rooftop rainwater at a school in Amsterdam

Wavin Netherlands is collaborating with Microsoft to implement an innovative blue-green roof system at a school in Amsterdam. The system collects rainwater to irrigate the school's rooftop urban farm and recharges the local groundwater aquifer. It also manages stormwater, enhances rooftop biodiversity, anticipates upcoming storms and droughts to optimize water use, and provides real-time performance data.

75. SWAN Systems: Revolutionizing park irrigation in Australia

Through a partnership with the Penrith City Council, SWAN Systems is deploying its innovative tool for efficient water and nutrient management in 40 irrigated parks and gardens within Penrith, a city in New South Wales (NSW), Australia, with plans to extend the solution to other councils across NSW. The tool aims to reduce water use by 20% each year, as well as prevent environmental damage from nutrient leaching and runoff. By using data from various sources, such as flow meters, weather stations, soil moisture probes, satellites and other sensors, the tool generates optimal irrigation plans for different sites and conditions.

76. Wavin Brazil: Transforming water management in Brazil

Wavin is working to reduce non-revenue water losses and improve network efficiency for the utility Sociedade de Abastecimento de Água e Saneamento (Sanasa) in Campinas, Brazil. Wavin will implement its Water Network Management (WNM) service, a cloud-based strategic decision-making solution, to monitor Sanasa's water network. WNM can detect leaks, bursts, faulty assets, operational features, and telemetry data in near real-time, alerting Sanasa when an issue is detected and delivering an action plan to resolve the problem.