

FROM THE 20th C MEGAPROJECT TO THE 21st C MEGA-ECO PROJECT

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MEGAPROJECT----- (NbS)

Resistant
Human centric
Singular function
Simple
Static
Inert
National
Gov/corp
Top down
Profit/debt
Progress



MEGA-ECO PROJECTS

Resilience
Biocentric
Multifunctional
Complex
Temporal
Living
Trans/National
Gov/NGO
Bottom Up
Not for Profit
Sustainability



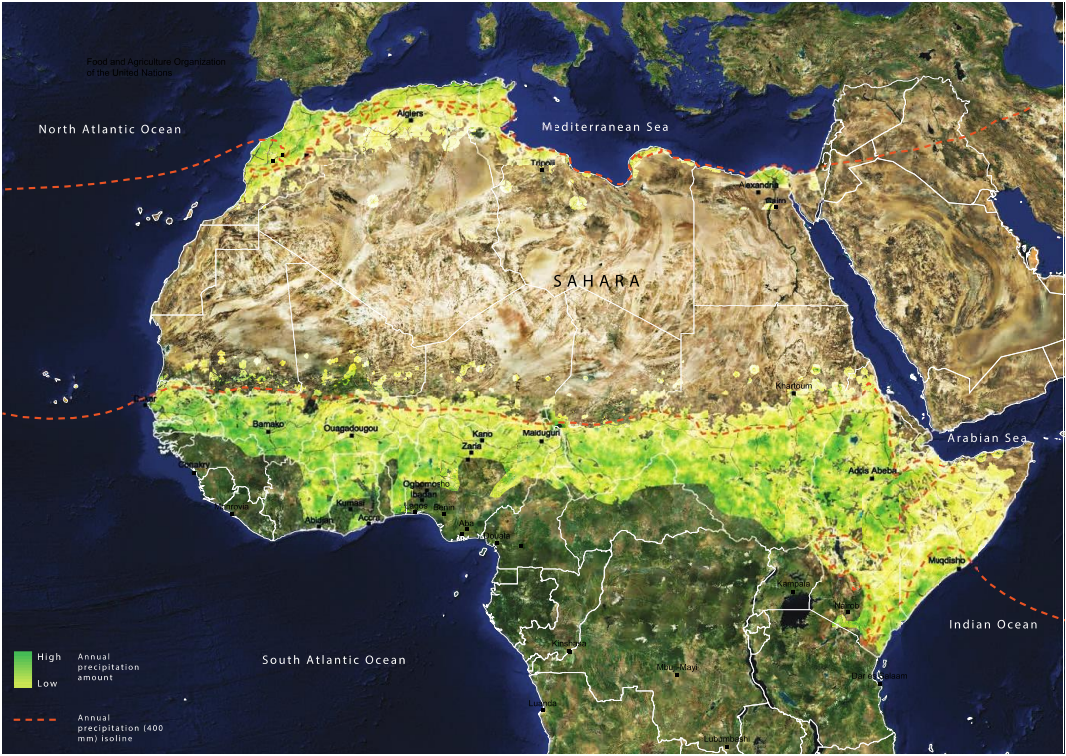
“ Mega-eco Projects are complex, landscape-scale environmental restoration and construction endeavors that aim to help biodiversity and communities adapt to climate change.”

FIGURE 12.2.1 Map shows the change in grizzly bear habitat over time. The Yellowstone to Yukon region is outlined in white and overlaid on color zones. Redrawn by Yang Zhao based on map by C. H. Merriam, Dr. B. McLellan, and IUCN. With permission, Yellowstone to Yukon Conservation Initiative.



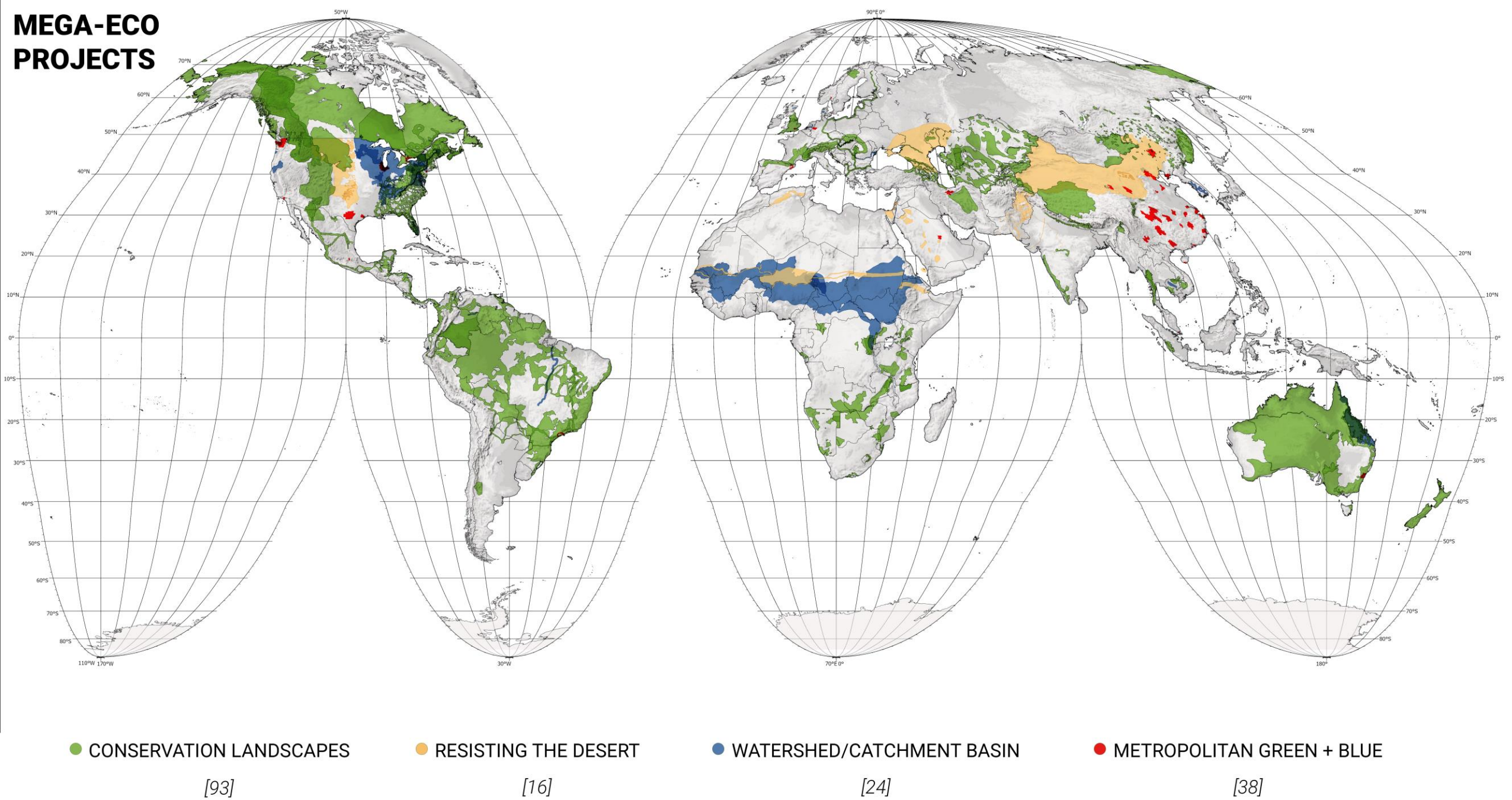
Y2Y : Yellowstone to Yukon

FIGURE 12.1.2 Light green zones show areas in need of landscape restoration. The large central swath is the Sahel region where the Great Green Wall is taking shape. Drawing, Anni Lei based on mapping by the Food and Agriculture Organization of the United Nations, esri, and Google Earth imagery. With permission.

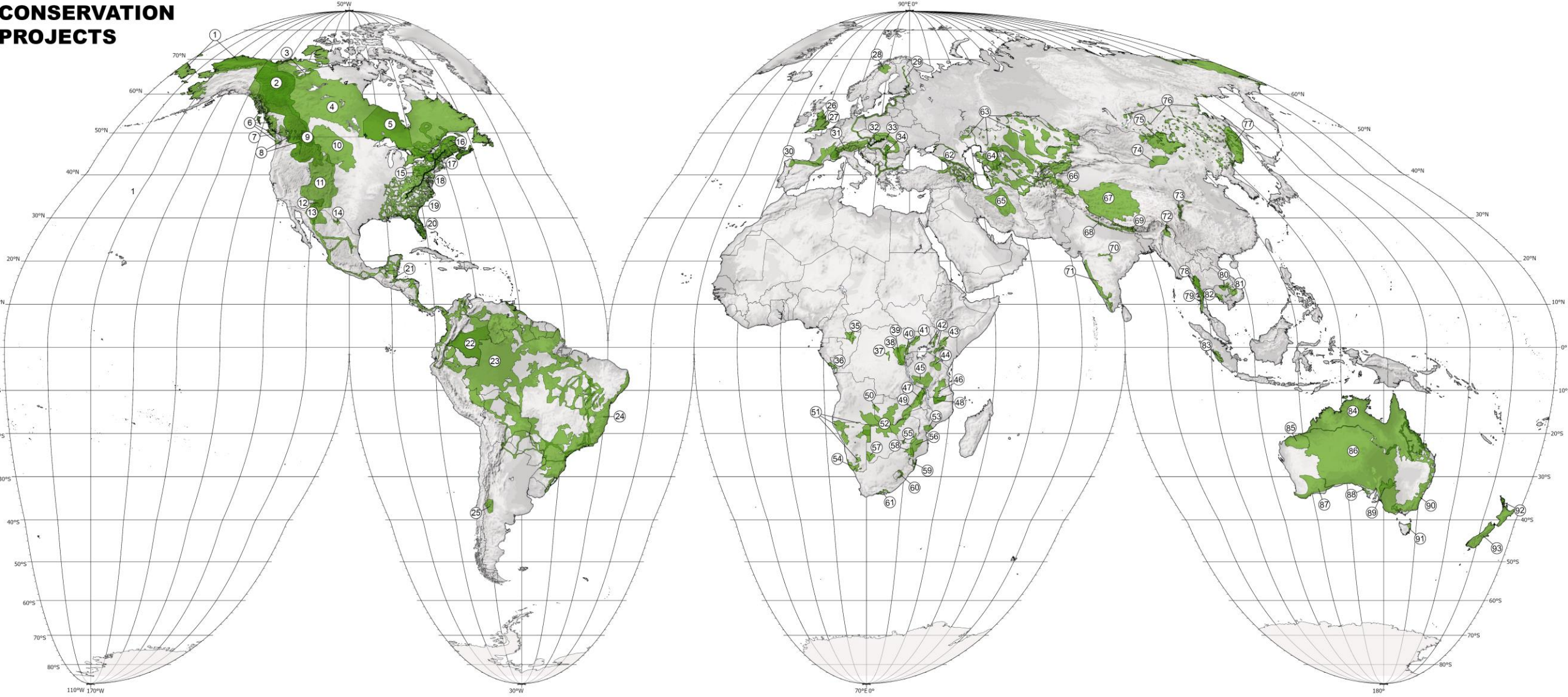


Great Green Wall

MEGA-ECO PROJECTS

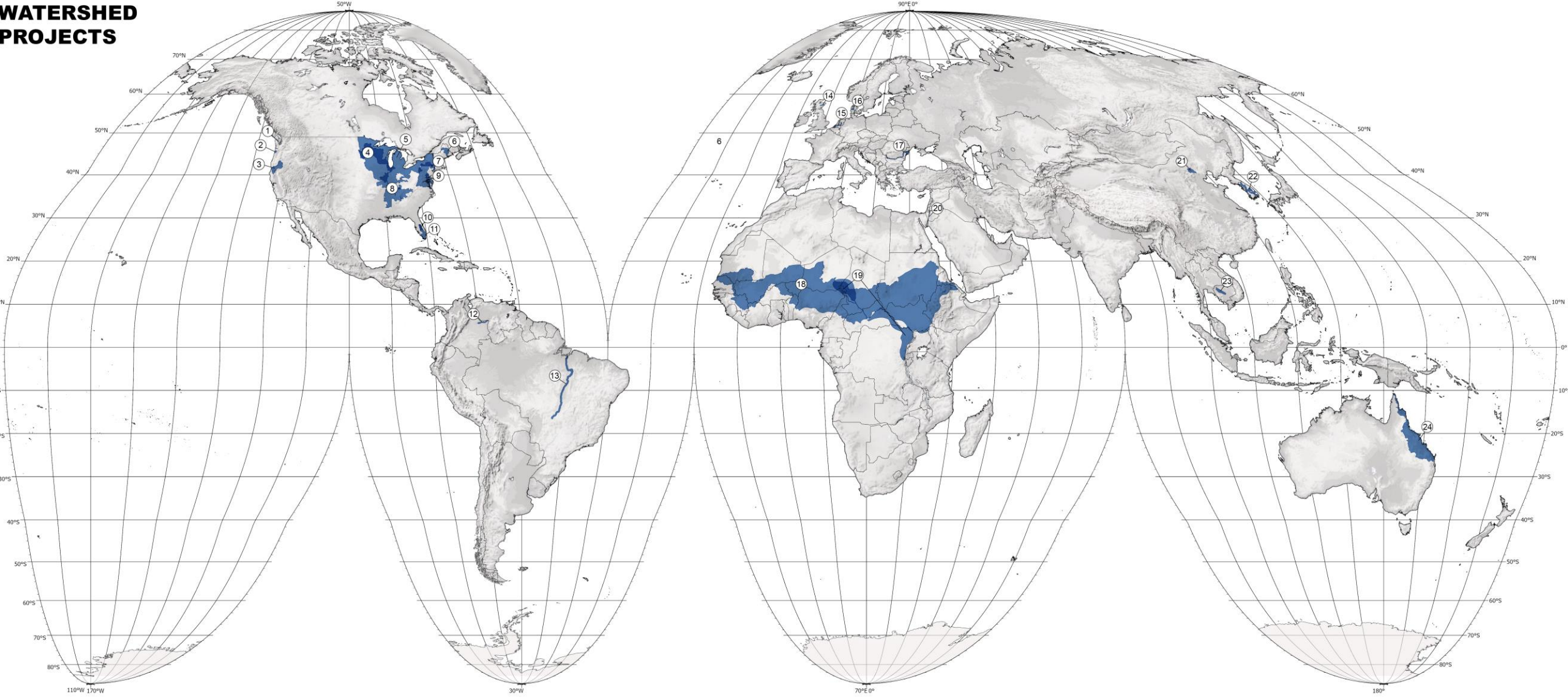


CONSERVATION
PROJECTS



- | | | | | | | |
|--|----------------------------------|---|--|--|--|---|
| 1. Arctic Beringia | 15. Keystone 10-Million Trees | 29. European Greenbelt* | 43. Northern Rangeland Trust | 57. Kgalagadi Transfrontier Park | 71. Western Ghats | 85. Pilbara Corridors |
| 2. Yellowstone to Yukon | 16. 2 Countries 1 Forest | 30. Greater Mountain Corridor | 44. Northern Tanzania Rangelands Initiative | 58. Kruger to Canyons | 72. Northern Forest Complex | 86. Ten Deserts |
| 3. Tsa Tse Biosphere Reserve | 17. Algonquin to Adirondacks | 31. Alpine Network of Protected Areas | 45. Southern Highlands and Ruaha - Katavi Landscape | 59. Lubombo Transfrontier Conservation Area | 73. Giant Panda National Park | 87. Gondwana Link |
| 4. Boreal Songbird Initiative | 18. Appalachian Trail | 32. Blue Trail | 46. Selous - Niassa Corridor | 60. Maloti-Drakensberg Transfrontier Conservation Area | 74. South Gobi | 88. Wild Eyre |
| 5. Forest Ontario's 50-Million Tree Program | 19. Eastern Wildways Network | 33. Carpathian Network of Protected Areas | 47. Malawi - Zambia Transfrontier Conservation Area | 61. Edden to Ado | 75. Eastern Steppe | 89. Habitat 141 Alliance |
| 6. Emerald Edge | 20. Florida Ecological Network | 34. Zarand Corridor | 48. Co-management of Niassa National Reserve | 62. Caucasian Ecoregion | 76. Amur Green Belt | 90. Great Eastern Ranges Kanangra Boyd to Wyangala Link |
| 7. Coast to Cascades Grizzly Bear Initiative | 21. Maya Golden Landscape | 35. Tri National De la Sangha | 49. Zambia Carnivore Programme | 63. Central Asia Econet | 77. Sikhote-Alin Russia | 91. Tasmania East coast Conservatoin Corridor |
| 8. Cascades to Rockies | 22. Heart of the Amazon Colombia | 36. Mayombe Transboundary Protected Area | 50. Liuwa Plans-Mussumma Transfrontier Conservation Area | 64. Ustyurt Plateau | 78. Western Forest Complex | 92. Reconnecting Northland |
| 9. Roundtable at the Crown of the Continent | 23. Jaguar Corridor 2030 | 37. Tshuapa - Lomani - Lualaba | 51. Namibia Communal Area Conservancy Programme | 65. Dashte Kavir | 79. Dawna Tenasserim Landscape | 93. New Zealand Billion Tree Programme |
| 10. Northern Great Plains | 24. SOS Mata Atlantica | 38. Maiko-Tayna-Kahuzi-Biega Landscape | 52. Kavango Zambezi Transfrontier Conservation Area | 66. Wakhan | 80. Northern Plains | |
| 11. Western Wildway Network | 25. Patagonia and Andean Steppe | 39. Strong Roots Gorilla Corrido | 53. Gorongosa - Marromeu | 67. Changtang | 81. Dry Forests of Indochina | |
| 12. Greater Gila Bioregion | 26. Northern Forest | 40. Greater Virunga Transboundary Area | 54. Ai Ais-Richtersveld Transfrontier Park | 68. Terrai Arc Landscape | 82. Cardamom + Elephant Mountains Corridor | |
| 13. Sky Alliance | 27. The Big Tree Plant | 41. Murchison-Semliki REDD+ | 55. Greater Mapungubwe Tranfrontier Conservation Area | 69. Sacred Himalaya Landscape | 83. Kerinci Seblat Landscape | |
| 14. Big Bend - Rio Bravo International Park | 28. Rewilding Europe | 42. Greenbelt Movement | 56. Greater Limpopo Transfrontier Conservation Area | 70. Central India Tiger Landscape | 84. Kimberley to Cape | |

* Exaggerated boundary



**WATERSHED
PROJECTS**

1. Elwha River Restoration

2. Salmon SuperHWY

3. Klamath River Renewal Project

4. Upper Mississippi River Restoration Program

5. Great Lakes Restoration Initiative

6. Penobscot River Restoration Project

7. Catskill / Croton Reservoir Areas

8. Tennessee River Renewal Project

9. Executive Order 13508

10. Kissimmee River Restoration Project

11. Comprehensive Everglades Restoration Plan

12. Protection of the Free-Flowing Bitá River

13. Araquaia Biodiversity Corridor
14. River Dee Trust - 1 Million Tree Program

15. Room for the River

16. Skjern River Restoration

17. Lower Danube Green Corridor

18. Blue Lifelines for a Secure Sahel

19. Transaqua Project

20. Red Sea - Dead Sea Conveyance

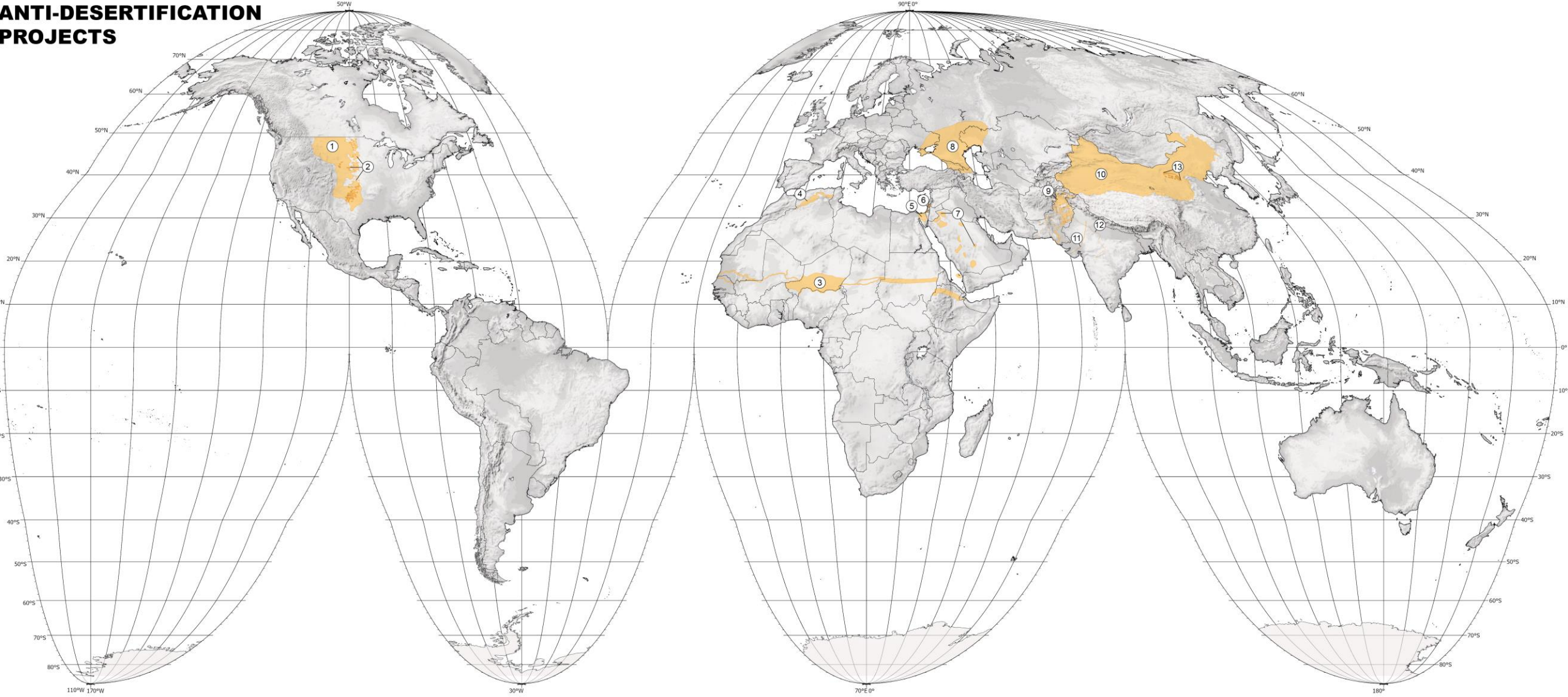
21. Miyun Reservoir

22. Four Major Rivers Project

23. Tonle-Sap Lake and Inundation Zone Corridor

24. Reef 2050

ANTI-DESERTIFICATION PROJECTS

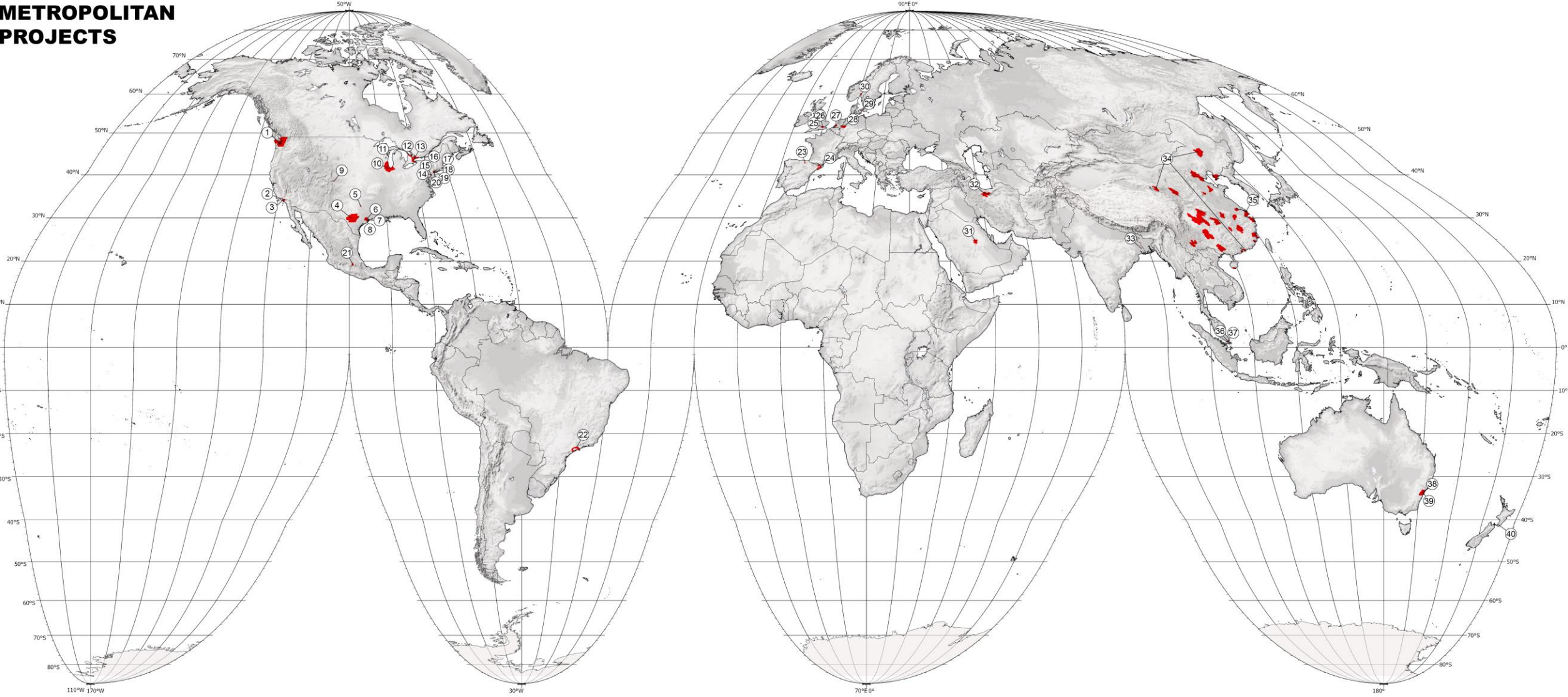


1. Buffalo Commons
2. Great Plains Shelterbelt
3. Great Green Wall of the Sahara and the Sahel Initiative
4. Algerian Green Dam
5. Regreen Sinai
6. KKL-JNF Israeli Forest Program
7. Saudi Green Initiative
8. Great Plan for the Transformation of Nature
9. (Ten) Billion Tree Tsunami
10. Three-North Shelter Forest Program
11. Great Wall of India
12. Great Hedge of India*
13. Kubuqi Project

- ✦ Not Pictured
14. Middle East Greening Initiative
 15. Algeria Reforestation Plan (France)
 16. Just Digg It

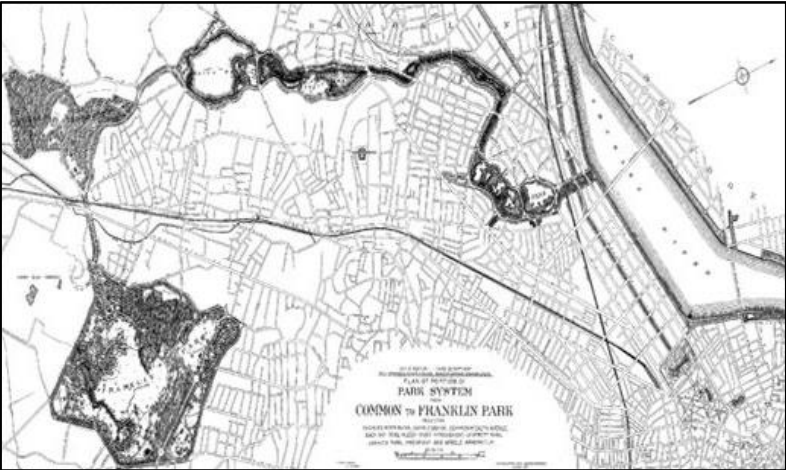
*Exaggerated boundary

**METROPOLITAN
PROJECTS**

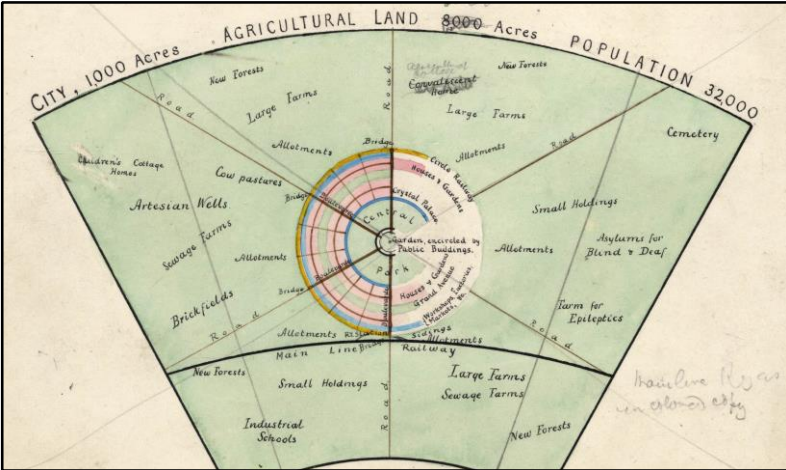


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|---|--|---|-------------------------|
| 1. Central Puget Sound Regional Open Space Strategy | 14. Plant 1 Million Philadelphia | 27. Rotterdam, Onward Stronger | 40. Wellington Townbelt |
| 2. LA River Watershed Project | 15. Green City Clean Waters | 28. Emscher Park | |
| 3. Million Trees LA | 16. Town of Amherst's Million Tree Pledge | 29. Lynetteholm Artificial Island | |
| 4. Hill County Alliance | 17. Emerald Necklace | 30. Oslo Reopening Waterways | |
| 5. Trinity River Corridor Project | 18. Million Trees NYC | 31. Green Riyadh | |
| 6. Houston Bayou Greenways | 19. Big U | 32. Tehran Greenbelt | |
| 7. Houston's Climate Action Planned | 20. Freshkills Park | 33. East Calcutta Wetland | |
| 8. Galveston Bay Park Plan* | 21. Regeneración Río la Piedad | 34. Sponge City | |
| 9. Mile High Million | 22. Sao Paulo Green Belt Biosphere Reserve | 35. The Shanghai Roots and Shoot Million Tree Project | |
| 10. Chicago Wildlands | 23. Greenbelt Vitoria Gasteiz | 36. Singapore Park Connector Network | |
| 11. Kinnickinnic River Corridor Neighborhood Plan | 24. Barcelona Greenbelt | 37. Singapore One Water Management | |
| 12. Million Trees Mississauga | 25. London Rivers Action Plan | 38. Sydney Green Grid | |
| 13. Ontario Greenbelt | 26. Metropolitan Green Belt | 39. Greening Sydney Strategy | |

THEMES IN METROPOLITAN PROJECTS



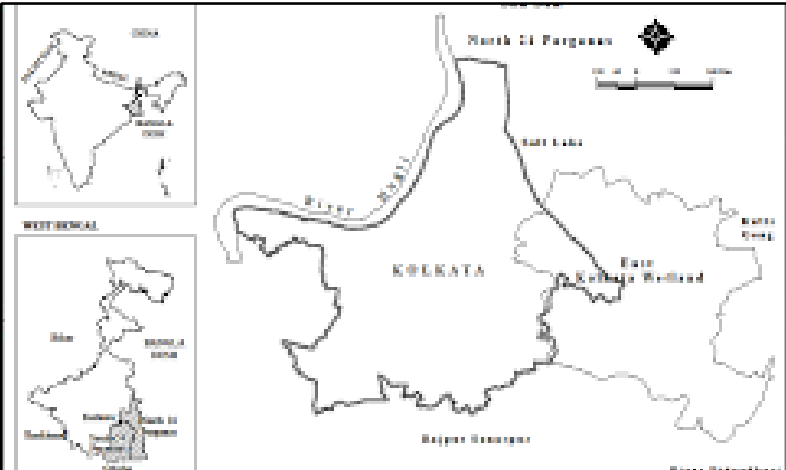
NATURE-BASED SOLUTIONS



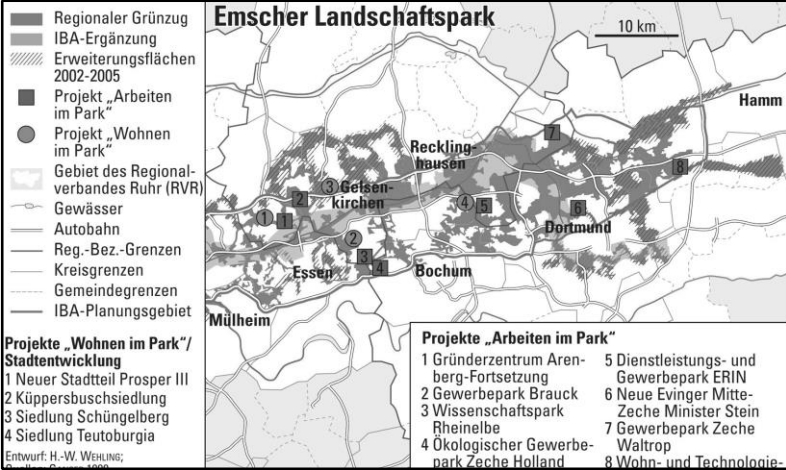
GREEN BELTS



CLIMATE ACTION PLANS



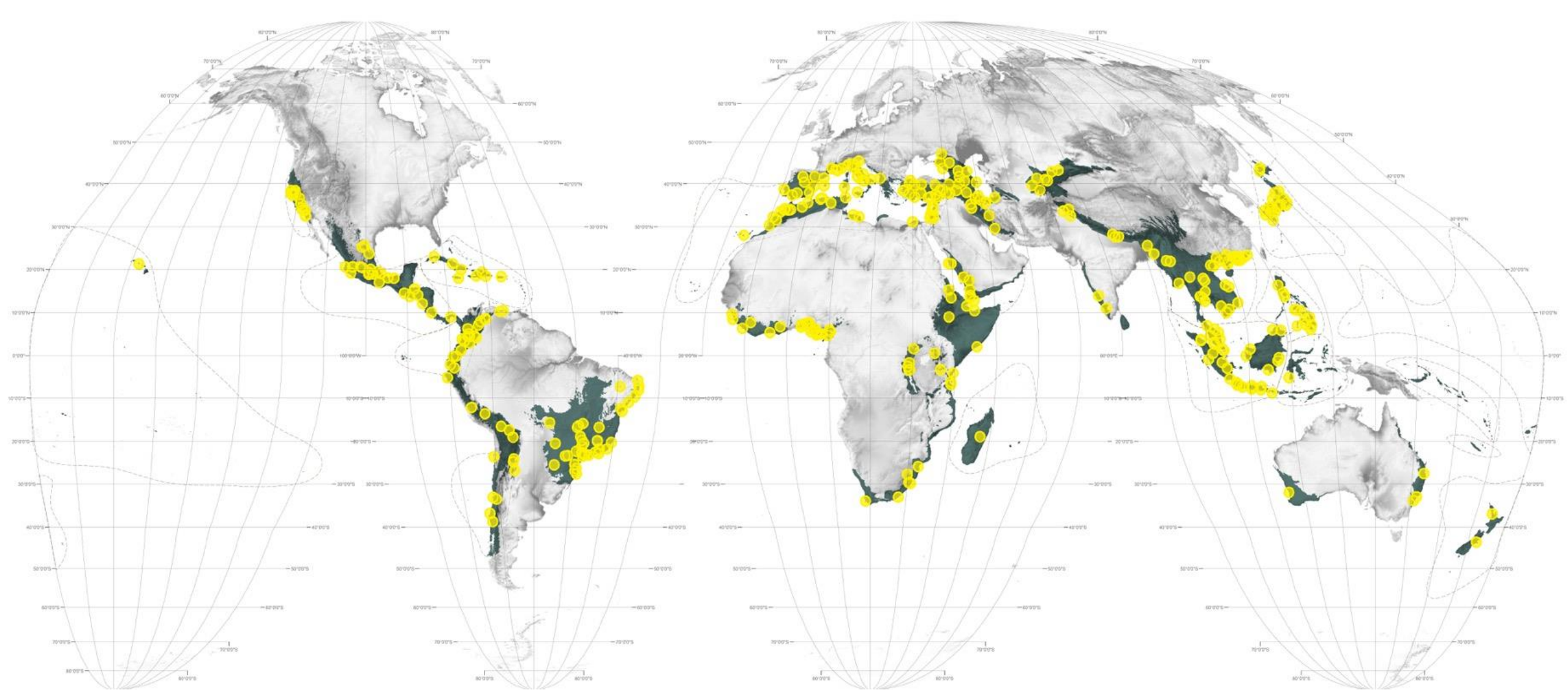
GREEN INFRASTRUCTURE



RE-USE / MITIGATION



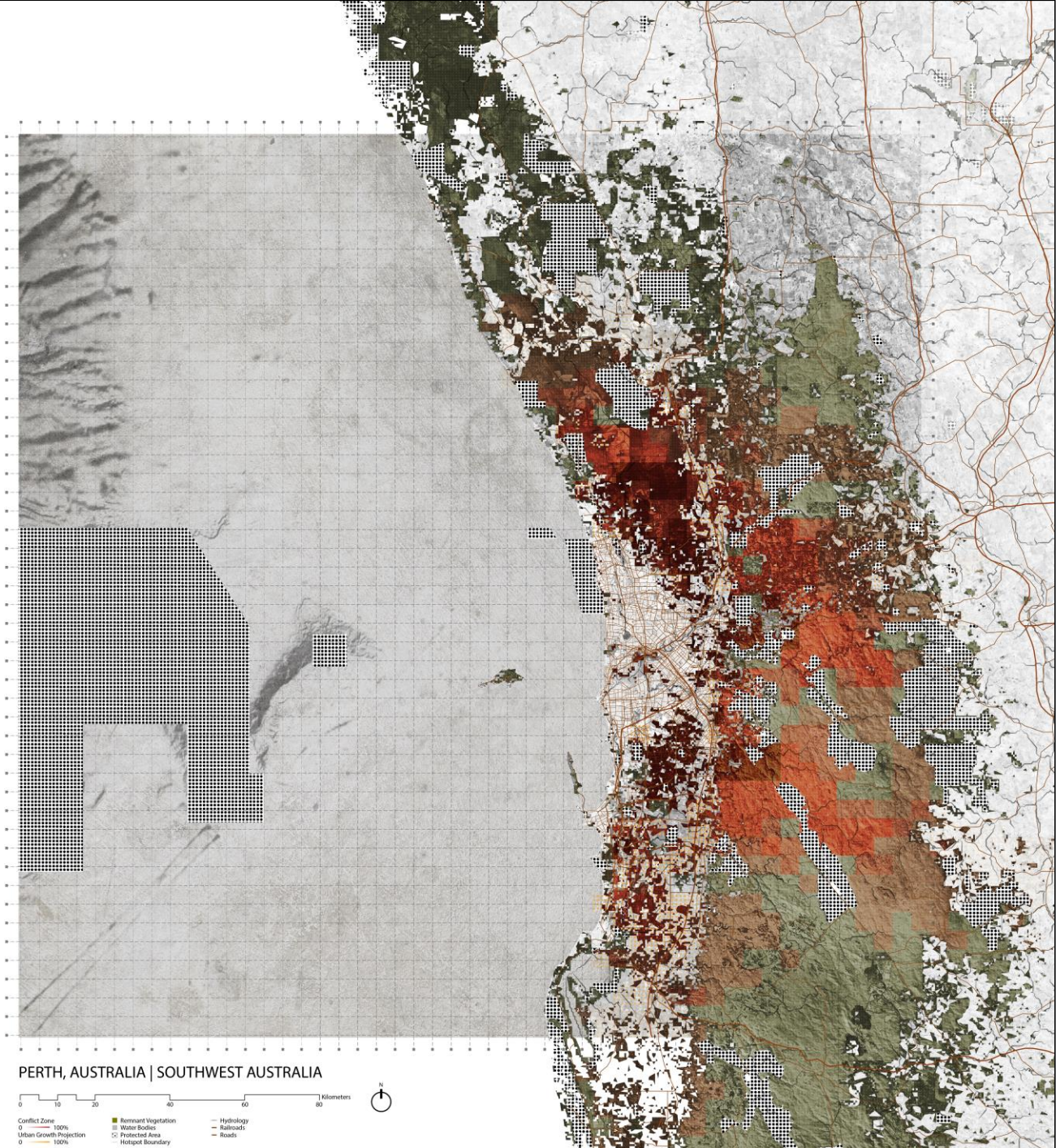
MILLION TREE PROJECTS



Hotspot Cities

IDENTIFY THE CONFLICT

- Growth Projection
- Species ranges
- Remnant habitat
- Climate related risks
- Equity



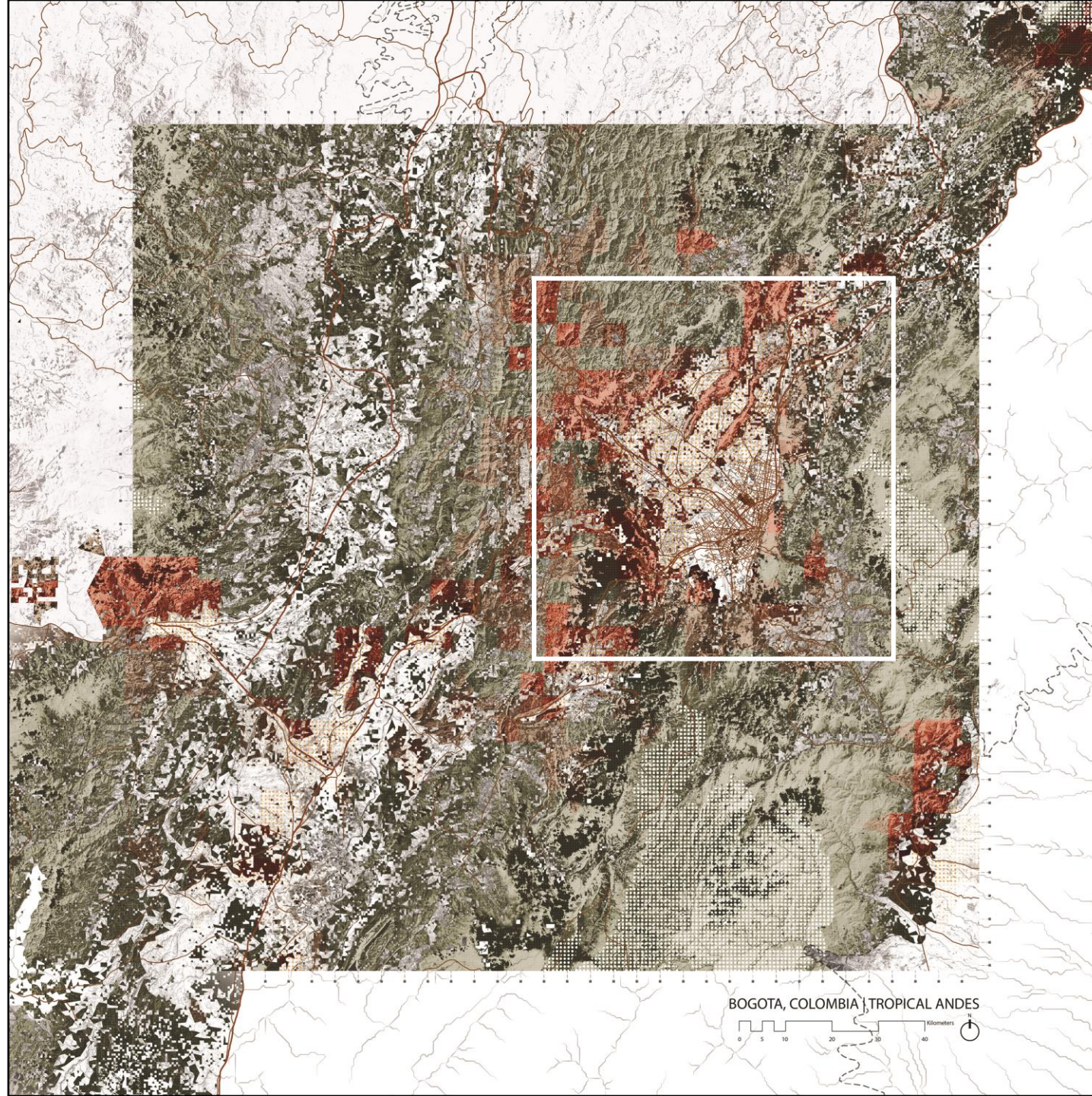


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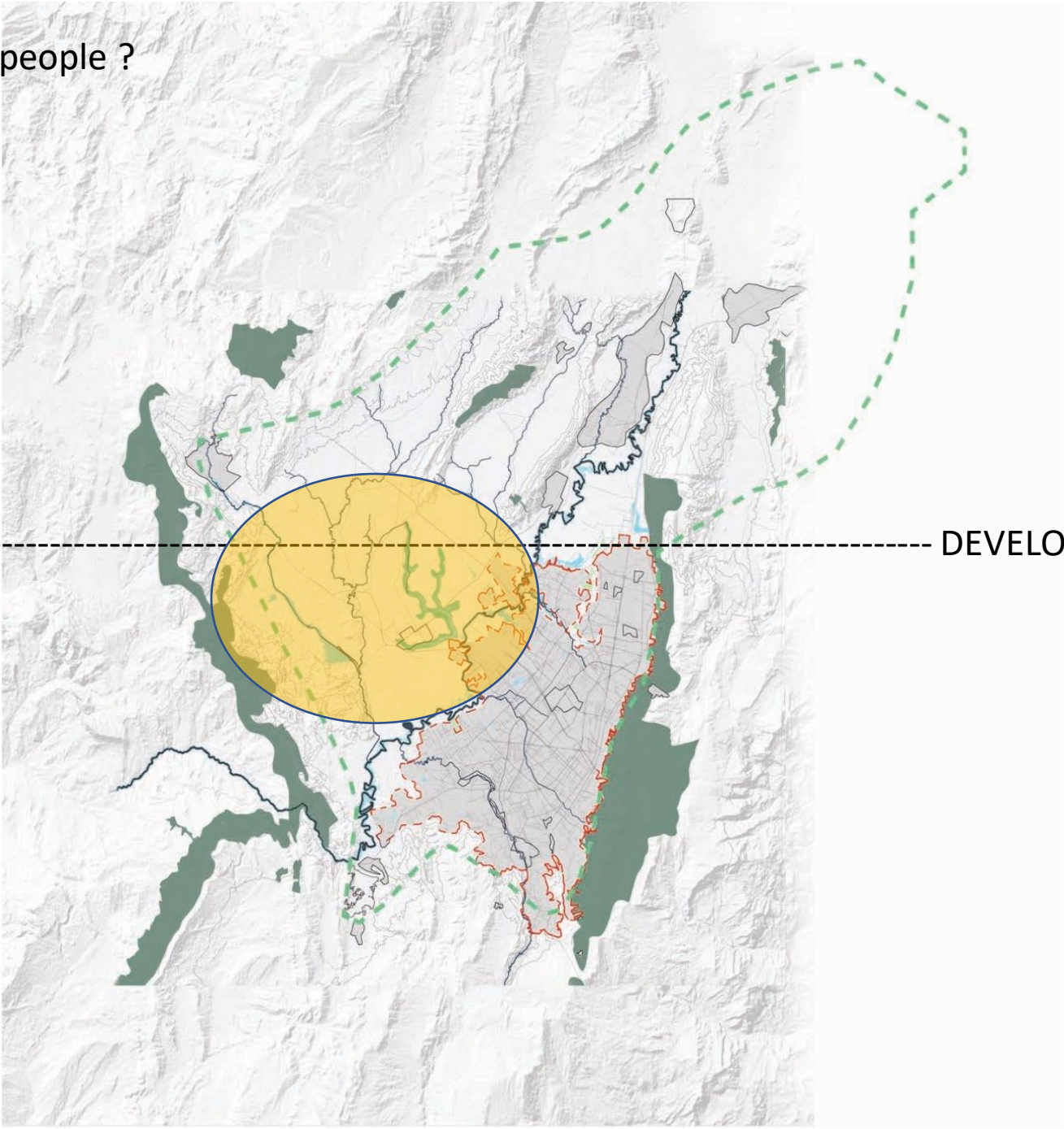
BOGOTÁ, COLOMBIA | TROPICAL ANDES

0 5 10 20 30 40 Kilometers

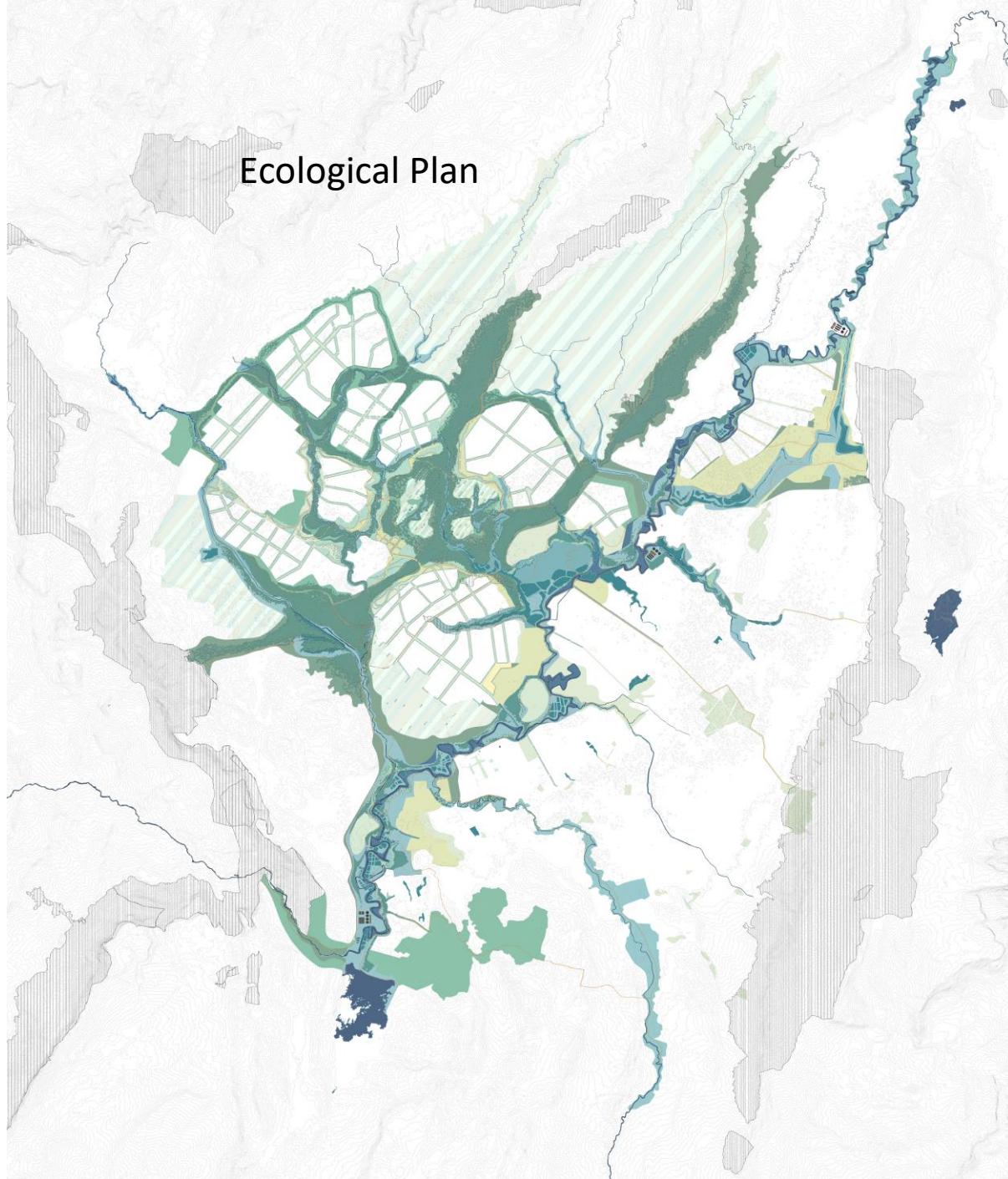
BOGOTA 2050: Another 5 million people ?

CONSERVATION PLAN

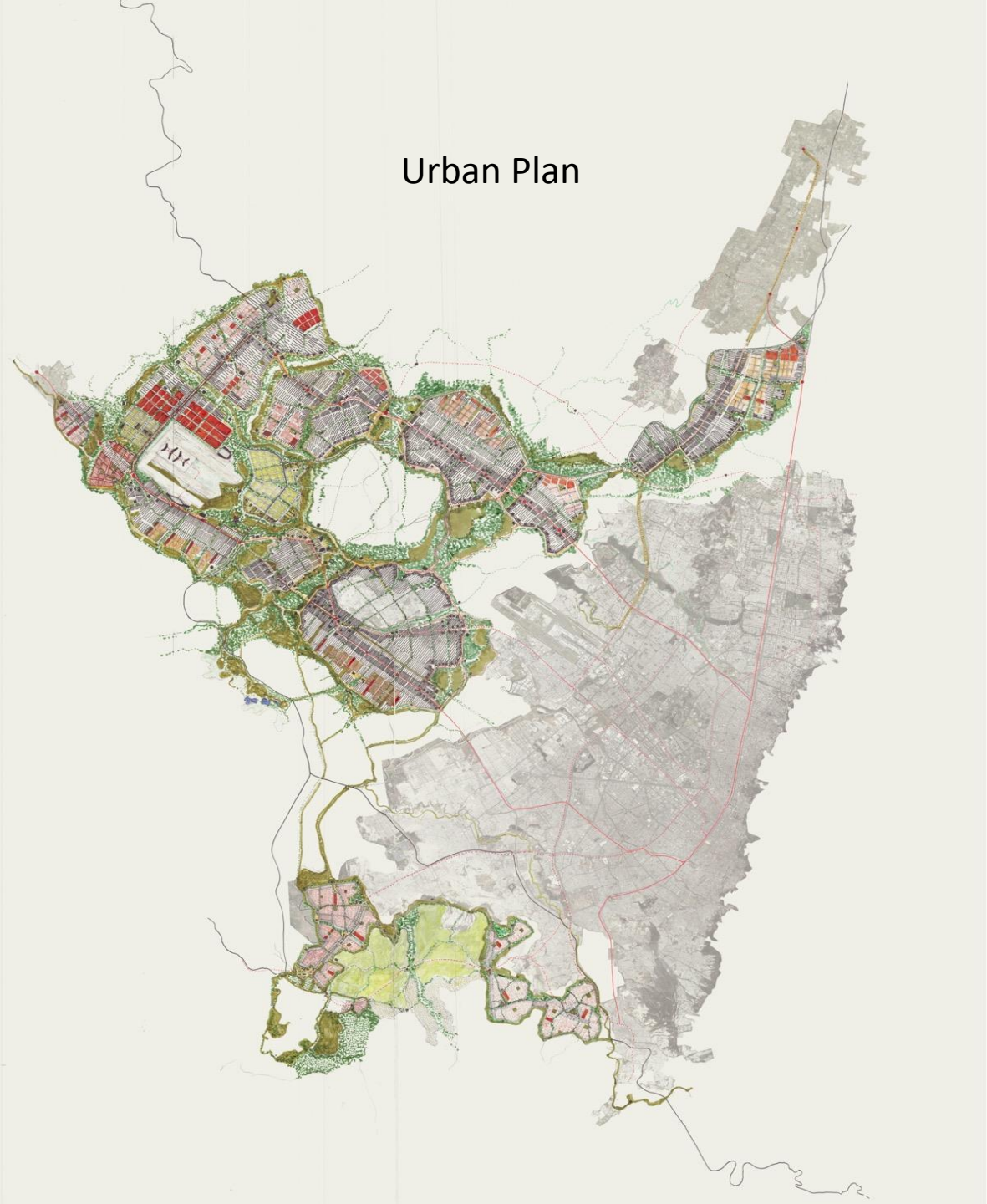
DEVELOPMENT PLAN

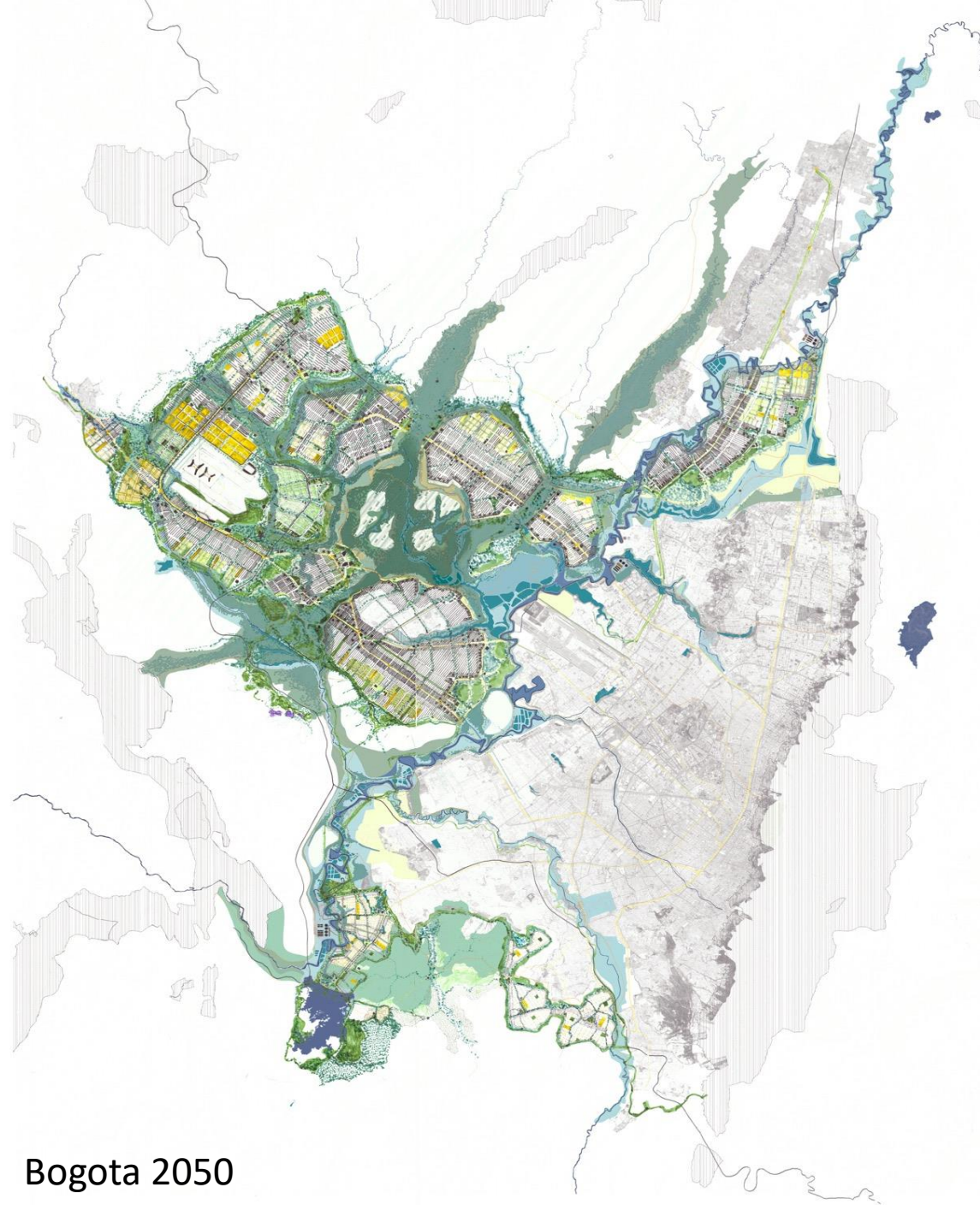


Ecological Plan



Urban Plan





Bogota 2050

