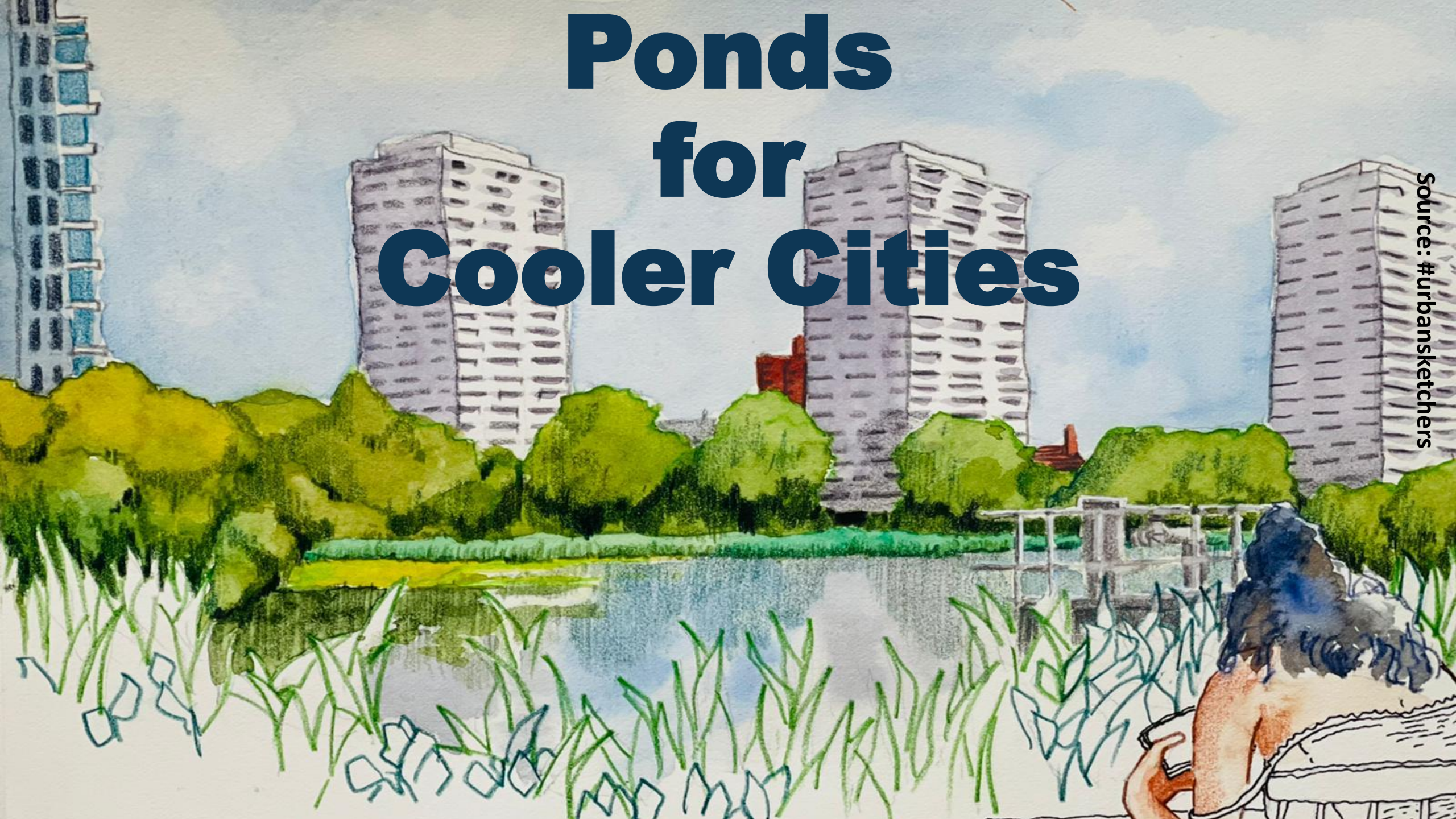




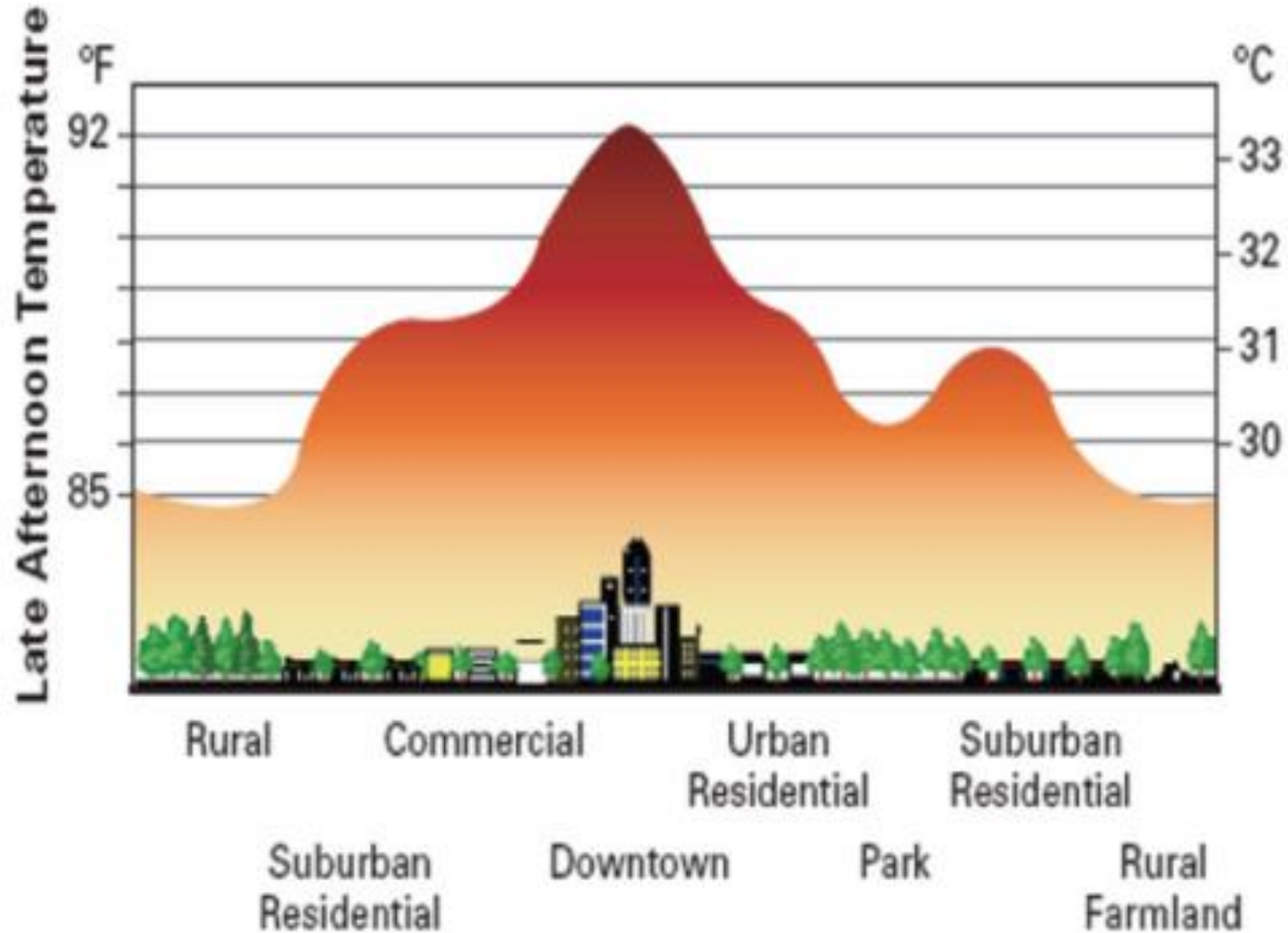
Say Earth

Ponds for Cooler Cities

Source: #urbansketchers



Urban Heat Island (UHI)



Ponds: Role in mitigation of heat waves

- Ponds are nature's saviours for mitigation of extreme events like heat waves. Surface water in the form of ponds has been shown to create a maximum temperature reduction of 1°C.
- They facilitate this function by:
 - Evapo-transpiration dissipates a large amount of energy.
 - Stores heat during the day.
 - Ponds and vegetation decrease temperatures by increasing the surface reflectiveness and decreasing the amount of solar energy absorbed.

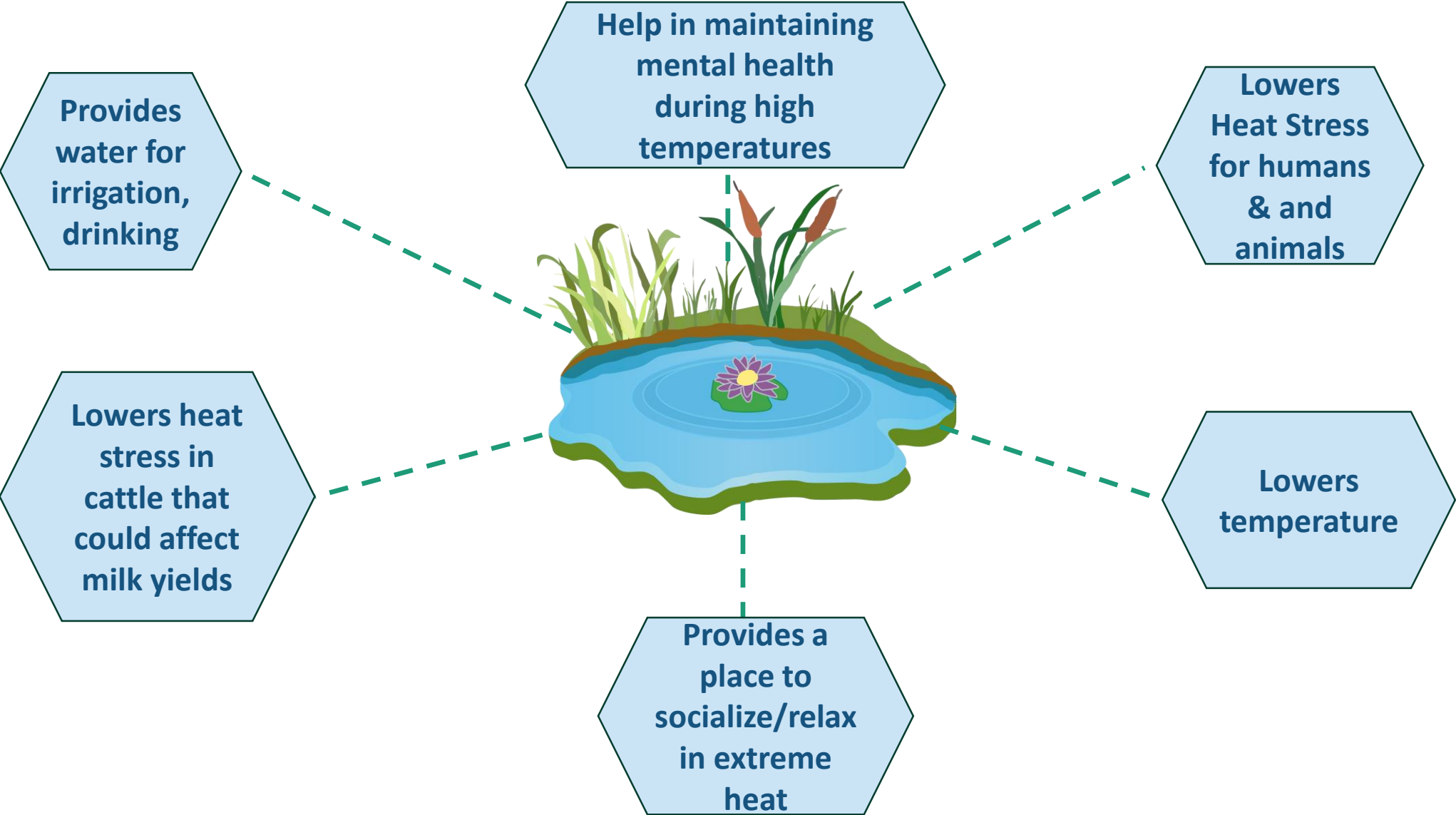


Ponds and Urban Heat Island Effect

- Studies show that waterbodies are an effective factor in the mitigation of urban heat island effects.
- Water bodies have a greater specific heat capacity than other materials on the land surface, resulting in water bodies that are “cool islands” during the daytime (Oke, 1987; Gunawardena et al., 2017)
- Through air convection, the cooler air on the water bodies blows to the surrounding areas and achieves a cooling effect, and occasionally, this cooling distance can reach one thousand meters (Murakawa et al., 1991).
- Therefore they act as natural mitigation solutions for the UHI effect.



Ponds also help in mitigating the effects of heatwaves





**Ponds Lower heat stress
in cattle that could
affect milk yields**



Therefore We Recommend.....

- **Waterbodies should be included in urban development and disaster management plans as natural solutions for mitigation of heat waves.**
- **Restoration and conservation of existing waterbodies should be prioritized.**
- **More blue-green infrastructure must be planned for urban areas.**
- **Dedicated knowledge products like modules and guidebooks be prepared and made available.**
- **Awareness generation sessions for the masses using innovative methods need to be conducted at various levels.**



Key issues with water bodies



Eutrophication



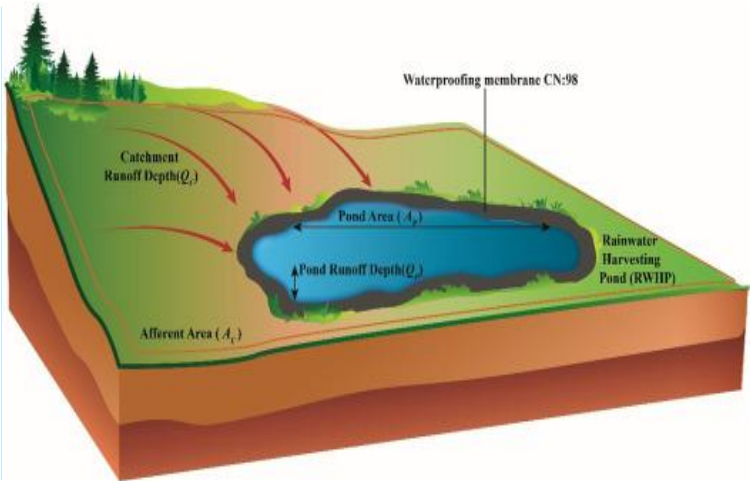
Solid waste



Siltation



Sewage



Catchment Area



Encroachment





Before



After





Before



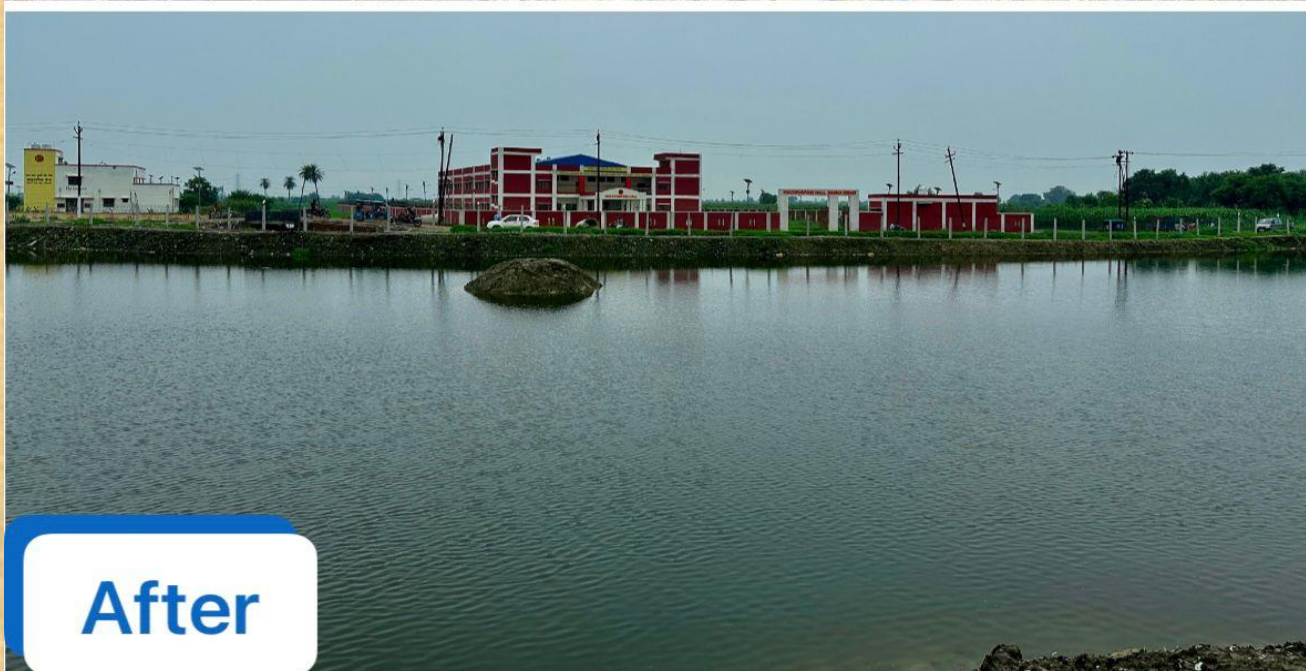
After



Before



2022



After



2023

Dasna Talaab

Kelkere Lake

Before

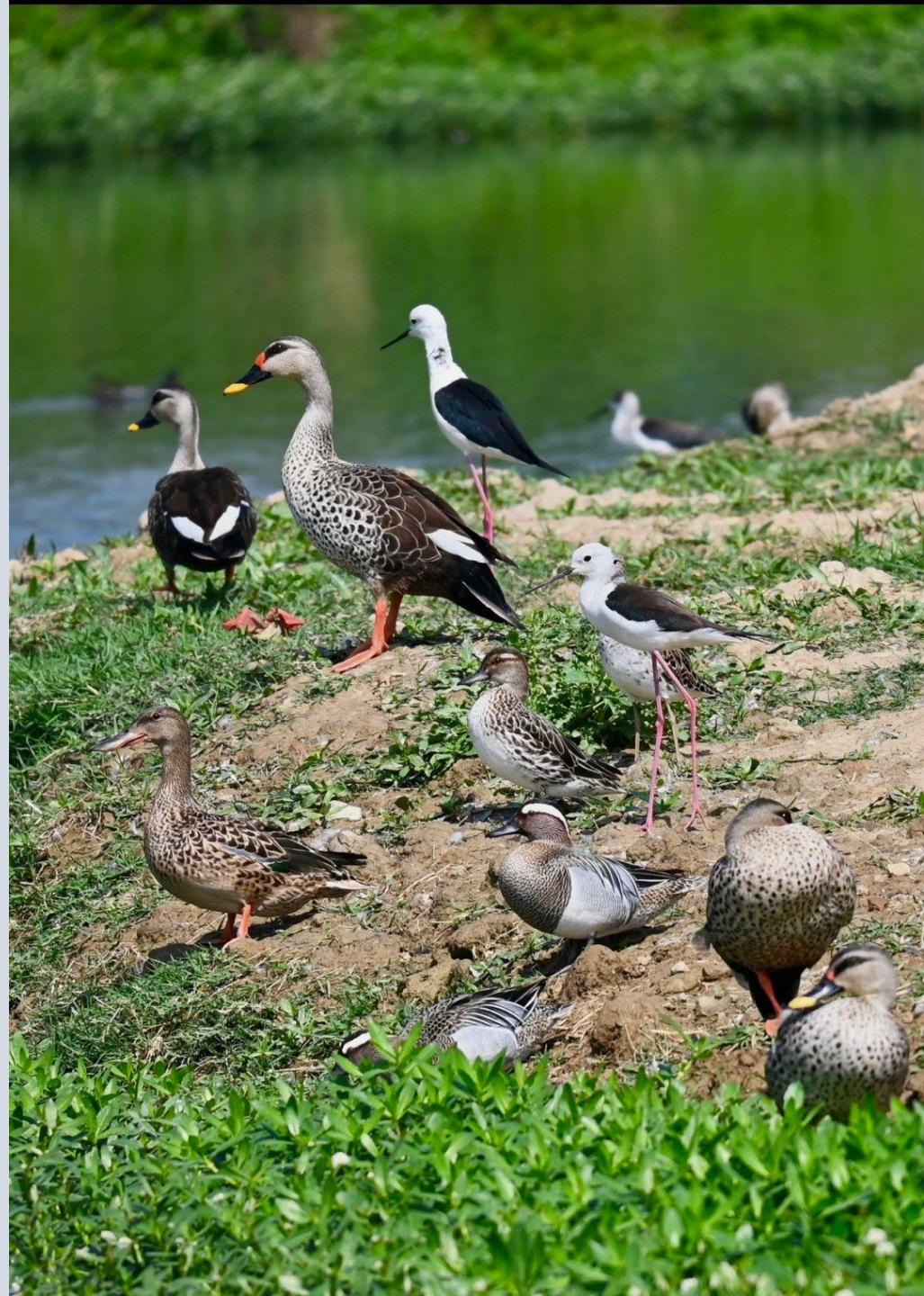


After



Pond Island





Mini Ponds for saving Forest, Wildlife and Humans



Self Sustainable Ponds



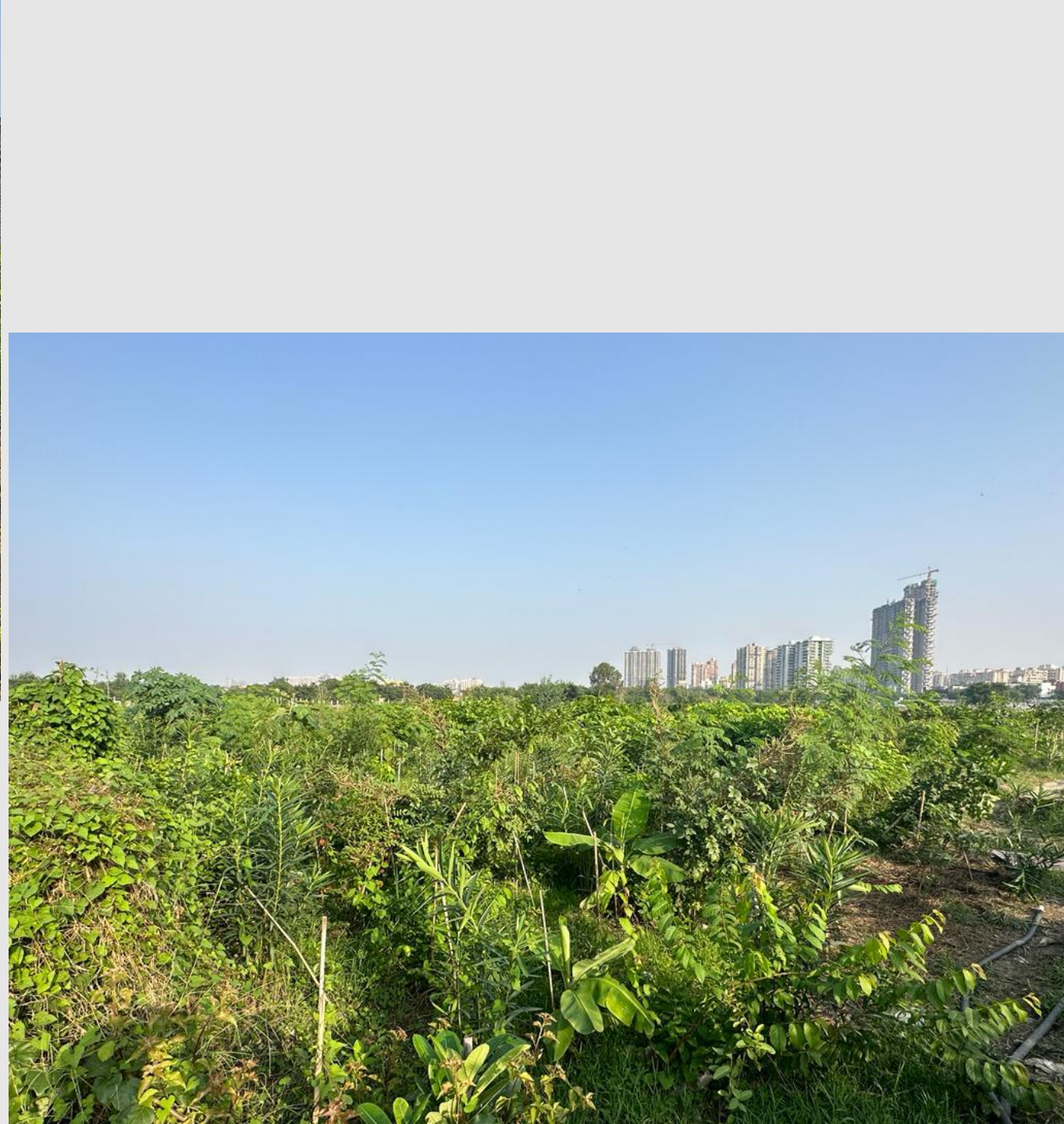
Community Support











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accenture

Sleepwell



Yogi Adityanath ✓

@myogiadityanath

आज @mannkibaat में उ.प्र. में गाजियाबाद के Pond Man श्री रामवीर तंवर जी द्वारा तालाबों को पुनर्जीवित करने के कार्य का उल्लेख करने हेतु आभार आदरणीय प्रधानमंत्री श्री @narendramodi जी।

श्री रामवीर जी का यह कदम जल संरक्षण-संवर्धन हेतु प्रेरणापुंज है।

आइए, इसका अनुगमन करें।

[Translate Tweet](#)

12:53 · 24 Oct 21 · [Twitter Web App](#)

MANN KI BAAT 82nd Edition - 24 October 2021

People of Ghaziabad in UP know Ramveer Tanwar as 'Pond Man'. Ramveer ji was doing a job after completing his mechanical engineering. However, such a sense of devotion for cleanliness ignited in his mind that he left his job and started cleaning ponds. So far, he has revived many ponds by cleaning them.

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Ramveer. **Veer in deed!** 🙏

The Better India ✓ ... · 29 Aug 20

Juggling his job in an MNC, this hardworking farmer's son utilises his after-work hours and weekends to breathe fresh life into Noida's lakes. The kind of hero India truly needs!...

14 32 324



Suniel Shetty [in](#) · 2nd 40m ...
Entrepreneur | Actor | Investor & Mentor | Spor...

This is phenomenal - thankful for all the work you're doing. God bless 🙏

Like · 11 | Reply



Thank You

