



Keeping our spaces green

Water conservation and sustainable planting for a changing climate

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- Context
- How plants deal with water stress
- Sustainable gardening tips
- Plant selection
- Most important thing you can do
- Questions

The origins of sustainability

Economy vs ecology

- Capitalist drive for growth resulted in the economy eclipsing ecology
- Expanding global populations = natural resource depletion
- Exploitation of natural environments posed major threats to the future

" It is only through the agency of air, soil and water that plant life is able to capture the solar energy upon which the whole hierarchy of life depends. Should not these elements receive the same care we bestow upon our other machines? And is not any theory that leaves them out rather like a theory of icebergs that fails to consider the submerged 90 percent?"

Herman Daly (1968)



Meadows et al. (1972) “The Limits to Growth”

- Sustainable without sudden and uncontrollable collapse
- Capable of satisfying the basic material requirements of all of people

Sustainability is a restriction to keep things within the boundaries of naturally occurring resources



Public Greenspace – Economy vs ecology

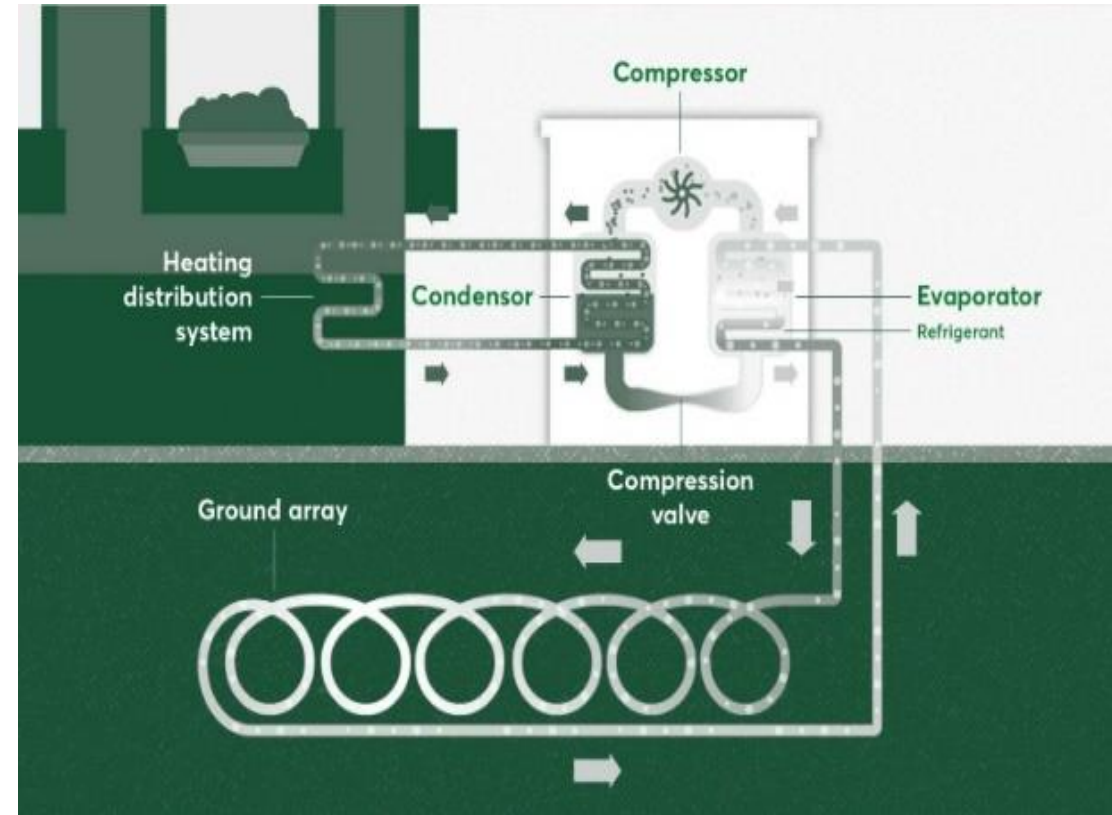


Greenspace funding

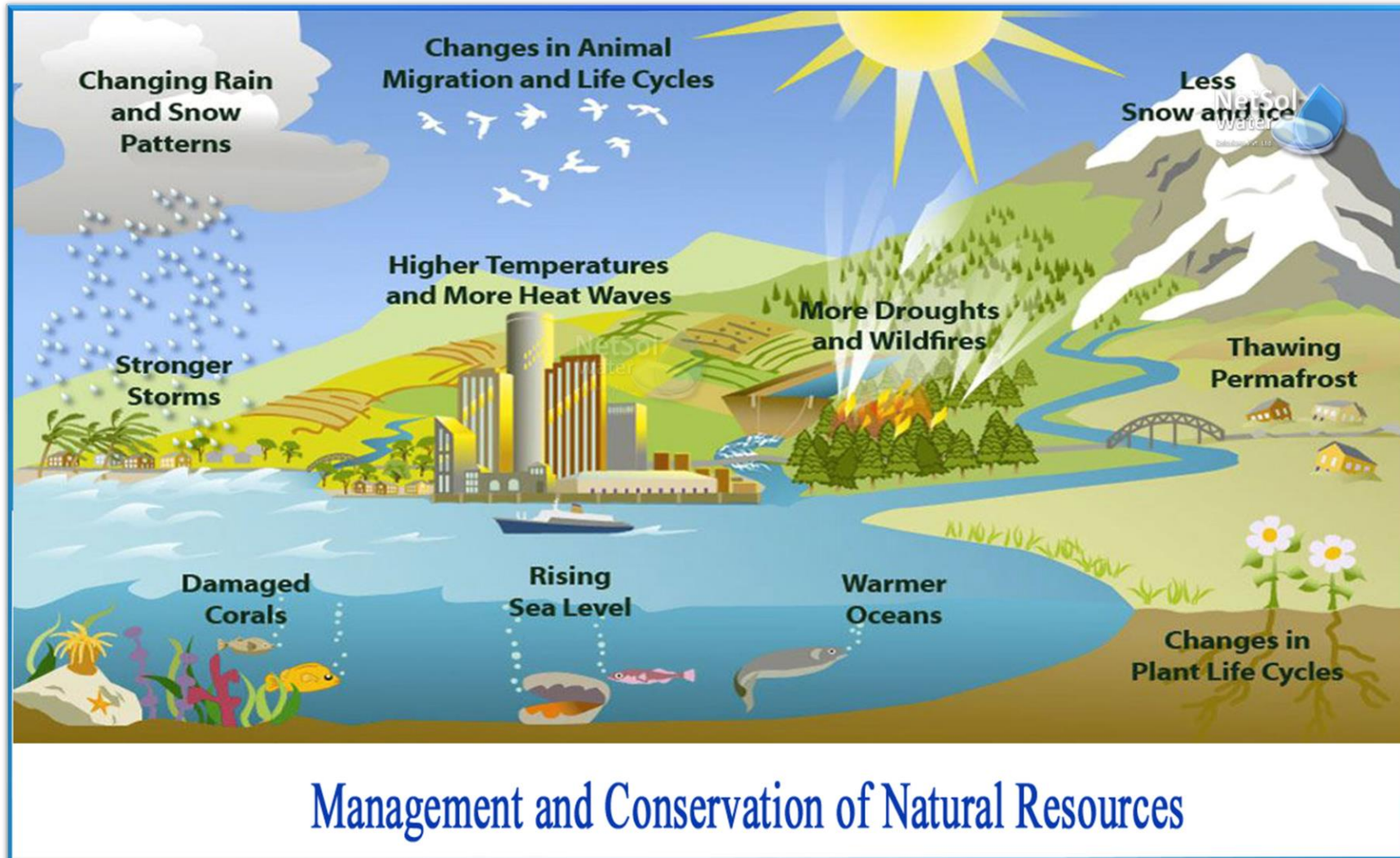
- 92% of park managers report cuts to budgets
 - Loss of over £690million over the last decade (Association for Public Service Excellence, 2021)
 - No statutory provision for local authorities to provide parks and greenspaces

New approaches to greenspace funding

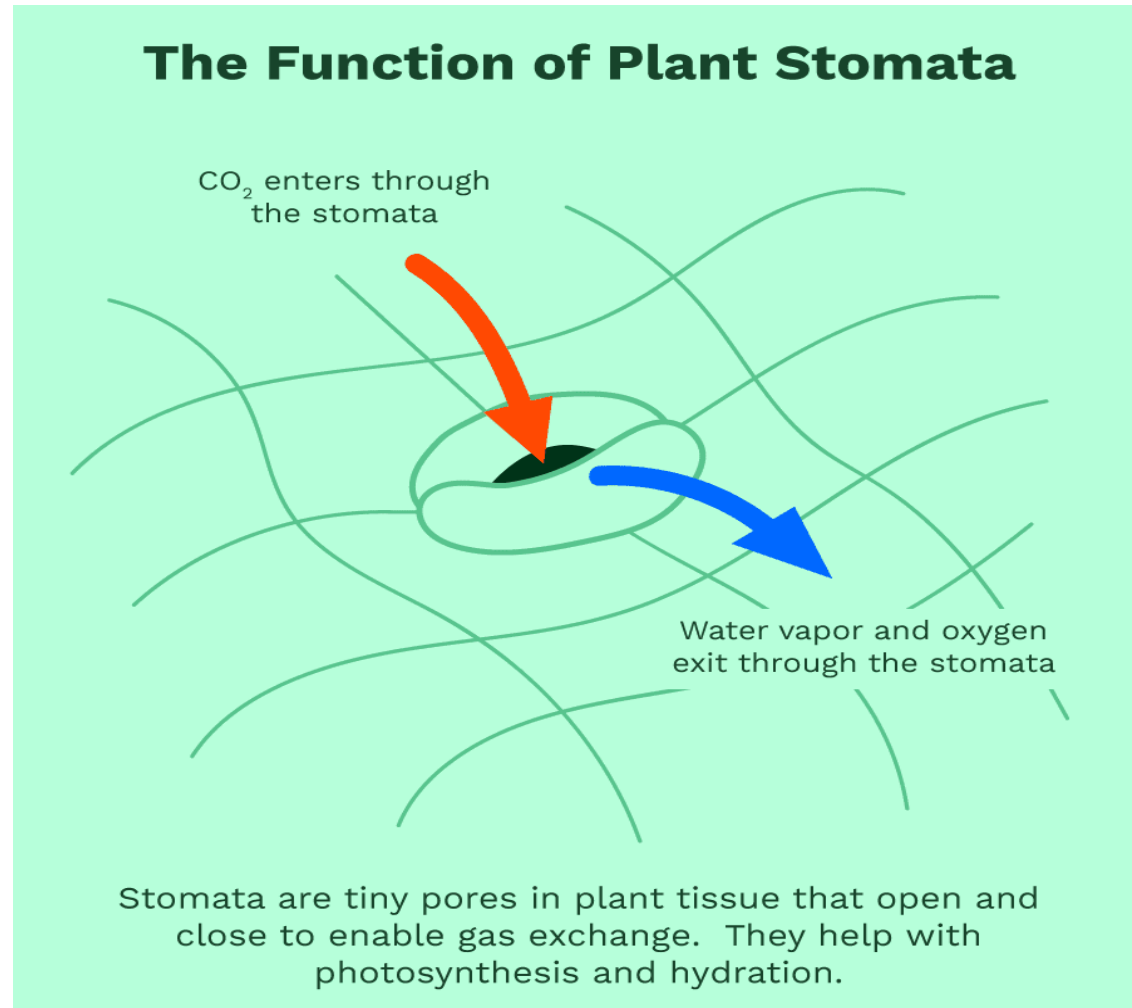
- Heat pumps located in greenspaces
- Produces local power for local facilities
- Generates revenue / reduces emissions



Why is sustainable use of natural resources important?



Plant strategies for dealing with water stress



Forsythia x intermedia



Cotinus coggygria



Cornus sericea



Hydrangea quercifolia 'Pee Wee'



Dead hedge



Ways to be more sustainable

- Tree planting
- Use a 'donut' when planting



Slow-release tree irrigation



Carya cordiformis



Colutea x media



Water the way nature intended

- Use recycled water butt
- Plant in autumn
- Focus irrigation on new planting



Lawns

- Replace with growing spaces
- Targeted irrigation – 10mins
- Keep longer
- Don't collect clippings
- No synthetic fertilisers
- No-mow may
- Meadows
- Electric power tools
- Scything



Place rocks / stones / mulch for cooler root run



Make your own compost / mulch

- Improves soil
- Conserves soil moisture
- Use leaf mould



Consider 'No dig'

- Improves soil
- Reduce the need for weeding / watering
- Cultivate only planted areas



Sustainable plant selection tips

- Plants with tap roots
- Plants with adaptations
- Plants that self-seed



Seseli hippomarathrum



Nepeta nuda 'Anne's Choice'



Salvia spp.



Ornamental grasses





Questions?

