

USP Forest Hydrology Laboratory (LHF)
Forest Science Department
ESALQ / University of São Paulo (USP)

Accessing tropical forest restoration contribution for water supply: insights from Atlantic Forest

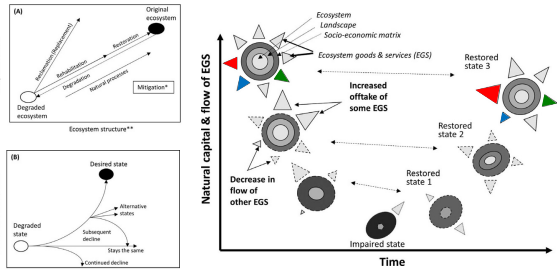


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Forest restoration challenge



Aronson et al (2017)

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Restoring forest ecosystems for water

- Hydrological functions:
 - Water yield
 - Flow regulation
 - Water quality
 - Aquatic environment conservation



Lima & Ferraz (2012)

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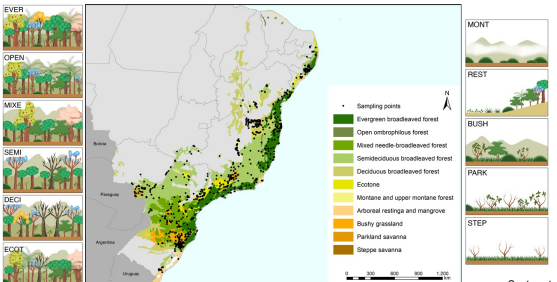
Atlantic Forest Biome



WorldAtlas - 2017

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Atlantic Forest Biome



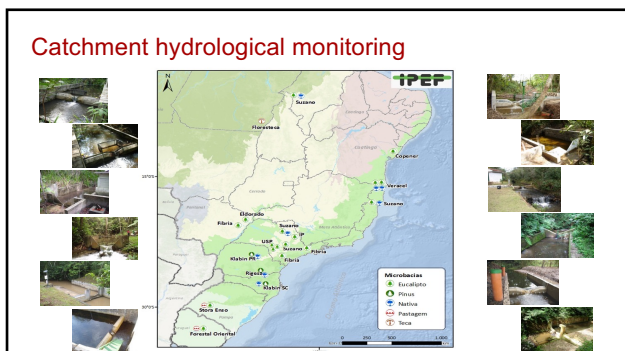
Santos et al. 2022

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Key questions

- How water use and regulation would interact along forest restoration process in Atlantic Forest biome?
- How balance these services throughout forest management?

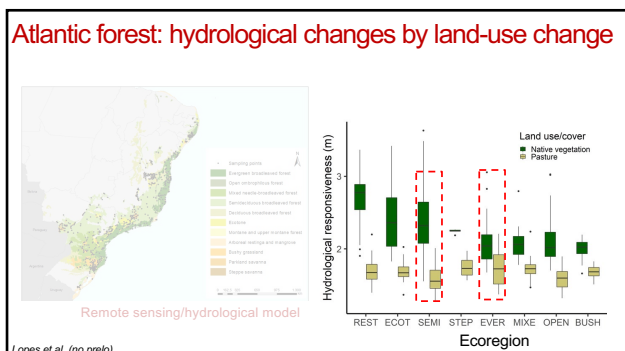
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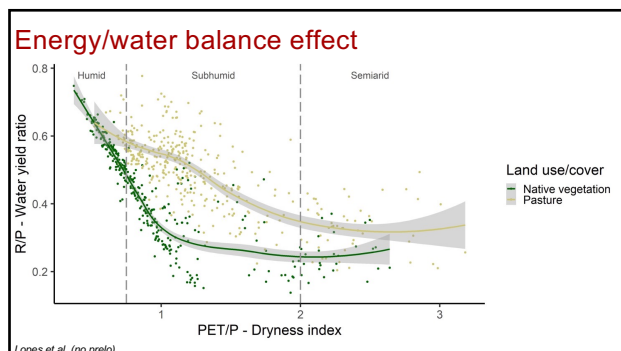
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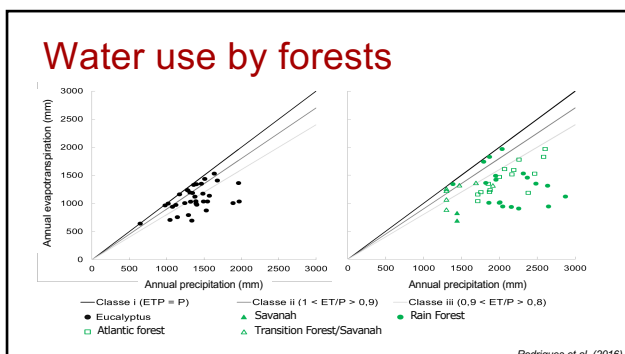
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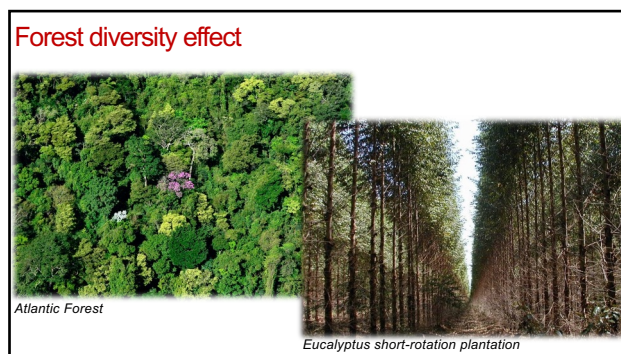
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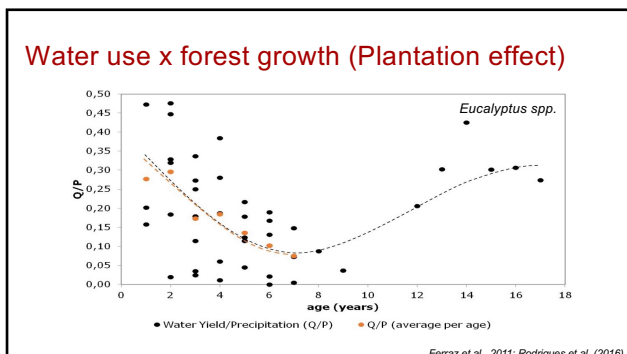
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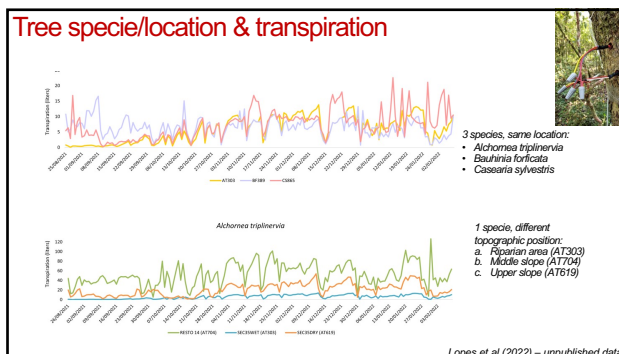
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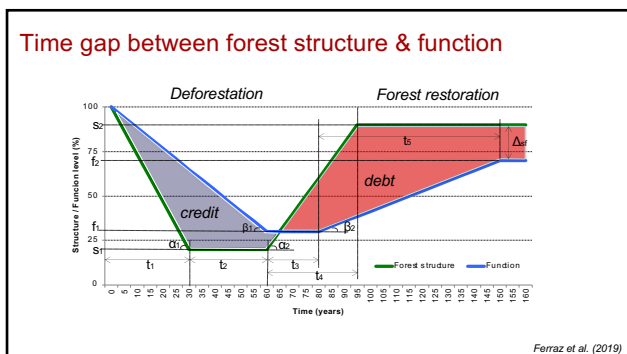
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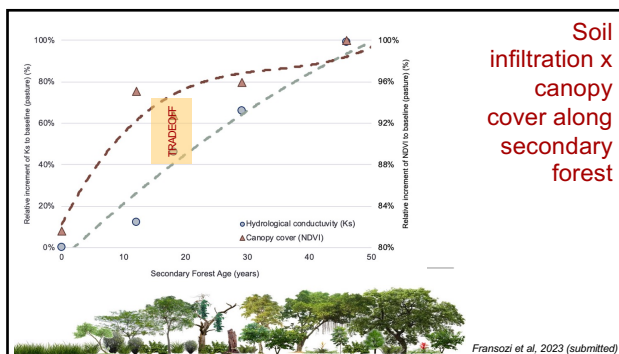
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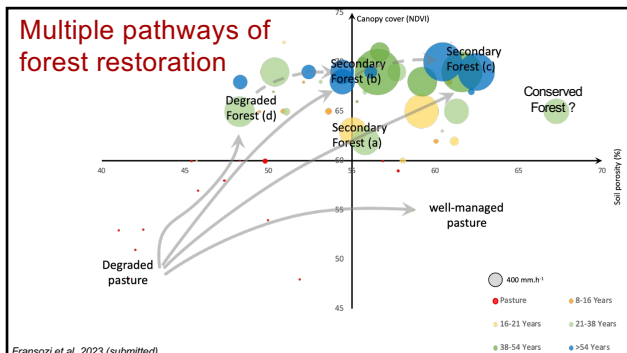
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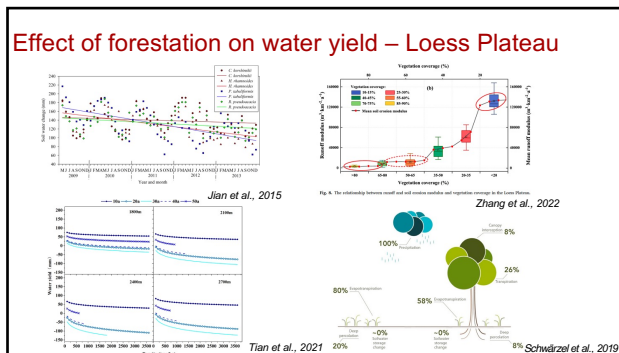
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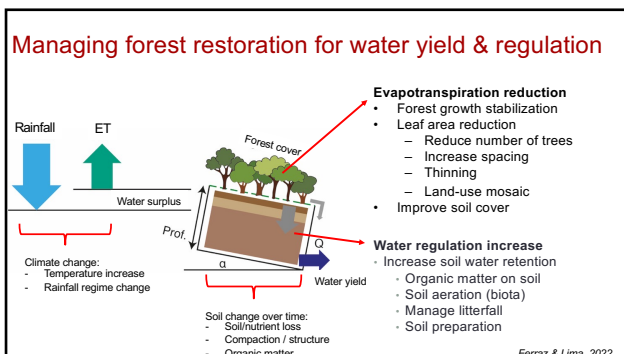
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Final remarks

- Subtropical areas subjected to water limitation present different responses to forest restoration
- New forests would provide different hydrological services from primary ones;
- Water yield and regulation functions of new forests could depend on specific management
- Forest projects seeking water yield/regulation at these regions maybe should focus on how to combine hydrological functions with other services.
- We already have enough knowledge to stablish forest restoration projects in water limited regions, we just have to apply it.

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Thank you!

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