

Earth Observation and Geoinformatics to Monitoring the Environmental Status of Urban Streams Inextricably Linked to People's Mental Health

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Impact of urbanization



- Rapid urbanization: Over 50% living in cities, projected 68% by 2050.
- Significant growth in Asia and Africa.
- Urbanization's impact on ecosystems, particularly rivers.



Urban Stream Syndrome

- Concept of "Urban Stream Syndrome."
- Consequences: Altered flow patterns, pollution, and biodiversity loss.
- Critical link between degraded urban water bodies and mental health.



Problem and significance

• The link between urban water degradation and human mental health is under-researched.

• Why is it important to monitor urban streams for mental health.



Green and Blue Spaces Linked to Better Mental Health

- Green & Blue Spaces: Encompass natural environments in urban areas, including vegetation (parks, forests) and bodies of water (lakes, rivers, coastal areas).
- Mental Health Benefits
 - Reduced depression, stress.
 - Improved well-being through engagement with nature.



Methods for Monitoring Urban Stream Health





Assessing Mental Health





Integrating HL7 FHIR for Mental Health and Environmental Data

- What is HL7 FHIR ?
- Utilization in the OneAquaHealth Project
- Benefits of integration





- Importance of maintaining environmental conditions in urban streams for mental health.
- Effective use of geoinformatics and earth observation in monitoring.
- Need for continuous monitoring to inform urban planning and public health strategies.

Thank you for your attention!





One AquaHealth Web-page https://www.oneaquahealth.eu

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