Rivers for Liveability – we all know its true!

It's all about Places?



What did we want to do?

Plan early

ensure recognition of social value in planning for waterways

Link to condition

use the waterway condition metrics that under pin social value Integrating information create an environment to represent and explore social values of waterways

Leveraging location create a typology to spatially represent social values of waterways



shocks and stresses, to harmoniously accommodate old civil society, irrespective of gender, age, ethnicity, cultural and new values, and to adapt the functions and requirespaces and the urban environment to the benefit of its feelings, the sense of ownership towards the city, the sense inhabitants.

ability of a city to 'invent' or 're-invent' itself through cities are open for participation from the widest range of the local heritage, culture and environment. At the same heritage, beliefs, religion and economic status. Inhabitants ments of the city. It illustrates a city's capacity to balance should have equal opportunities to participate in the needs to be sustainable and match the expectations of continuity with change, heritage and innovation, natural activities of a city. Inclusiveness enhances community the citizens. of belonging to a place.

time, a city needs to accommodate social, economic and technological changes - and evolve itself. This evolution

An outhentic city can create a sense of pride and belonging "This is my city." It can make a city lovable as well as livable.

In an inclusive city, inhabitants are actively involved from the start of every city initiative. The city is open to political participation from the wides

Great for messaging / comms

but

not so great for strategic asset planning

What makes a cityliveable?

1. What does this photograph tell you about the

Where are the world's most and least liveable cities?

How can we make cities more liveable?

The relationship with the surrounding rural area is moortant for resilience Food supply and urban agriculture need to be considered.

The history of a city makes it thentic, It reflects local cultur and local knowledge and reinforces a sense of place and the local identity.

interdependent within a system of other cities and also with the rural environ nt surrounding t



All good stuff but not much focus on waterways in this lot! BUT

"liveability" is an aggregate idea



What exactly are our questions?

Can we **spatially represent** the social value (liveability) contribution of water ways?..

Can we set up a framework to **spatially integrate and explore the relationships** of social values of water ways? ...the "where" and "why"...

How we think about social values for waterways

Representation



The 3 R's of integrated spatial information



Resolution



Representation - Defining social values for waterways



Amenity — the pleasantness of waterways and their ability to provide a restorative escape

Community Connection — waterways connect the community with nature and with each other

Recreation — waterways provide a setting and potential for active and passive recreation

Context – contextual metric like distance from waterways, catchment identifier, tenure category etc

Representation - From Category to Criteria to Metrics?

Category	Criteria	Metric
Context	Demand - Population within the area of interest	Mean density of population at a statistical mesh block level across the area of interest (data sourced from Australian Bureau of Statistics)
Amenity	Sense of escape – The amount of "isolated" waterway / river valley	Mean density of regional sinks (valleys and slopes as identified through using the Topographic Position Index (Jenness) tool) across the area of interest
Community Connection	Community engagement – Community grants	Presence of community grant sites across area of interest (data sourced from Melbourne Water)
Recreation	Active recreation – Bikes	Mean density of bike trails across the area of interest (data sourced from VicRoads)

30+ additional metrics



Bottom 10% Road Casement Density Deciles

Example

Category: Amenity

Criteria: Access to the waterway

Metric: Density of road casements to indicate accessibility of waterways





Example

Category: Amenity

Criteria: Sense of escape

Metric: Density of waterway valleys to indicate "isolation" from urban life

Resolution – what is the geography of social value of waterways?



Some considerations:

Operational use

□ Knowing "where" and "why"

Appropriate scale

Ease of use



□ Flexibility

Resolution – creating a social value mesh





- □ One geography for all metrics
- □ All metrics in one database
- □ One database many curated views
- Enables simple queries "profiling or targeting" using multiple metrics
- Can add metrics as required
- Can add context metrics catchments, proximity to waterway etc

Relationship – what type of method will be useful?



Relationship – how does targeting work?





Where are the locations with significant sense of escape that are easily access?

Criteria used: Access to Roads Sense of Escape

Metric thresholds: Access to Roads – top 10% Sense of Escape – top 10%



The framework



The framework benefits

- Consistent Structured approach to metric development
- Reliable forces clear definitions of metrics
- □ Transparent tells you where and why
- □ Interoperable any GIS can consume this format
- Accessible easy to use resource for decision making
- □ Scaleable can easily add additional metrics



Thank You



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