

can an

ULILU

replace your

LULU?

a decision support system for publicly funded landfill redevelopment

Mike Campbell · 03 May 2024
Version 1.01 · Updated 23 September 2025



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ULTRA LOW INTENSITY LAND USE

ULILU

replace your

LOCALLY UNWANTED LAND USE

LULU?

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THE PROBLEM

“shouldn’t we do something with that old landfill?”

Even sites
without
contaminated
soil or water are
problematic.

It is extremely
costly to build a
stable foundation
above unstable,
decomposing
garbage.

Projects simply
do not pencil.
Hence, sites
remain vacant.



Dorothea Maria Henrietta Gsell — Spectacled caiman and a false coral snake — (c. 1701 – 1705)

THE SOLUTION

“maybe that weird grad student has some kind of decision-support framework?”

THE SOLUTION

Ultra low-intensity land uses — “ULILUs”
that don’t require traditional foundations —
are low-cost alternatives to vacant
brownfields, expensive site mitigation, and
cost-prohibitive deep-pile foundations!

“maybe that weird grad student has some
decision-support framework?”



A Decision Support System for Landfill Redevelopment



1

Identify sites, site boundaries, and minimum conditions that would trigger site remediation.

2

Identify sites for which remediation will proceed based on physical/chemical requirements, acceptability of ultra-low intensity land uses, and cost.

3

Execute on plans *or* accept that the land will remain vacant until

Inventory sites and establish remediation criteria

1

Establish physical/chemical benchmarks
based on expert assessment

Identify responsible agencies / departments /
jurisdictions

Designate lead agency

Identify subject matter experts

Staff interagency panel

Inventory sites

Establish health and
resource needs /
priorities

Establish physical /
chemical benchmarks
necessary to meet
these needs and
priorities

Identify restorative justice issues requiring
remediation

Identify responsible agencies / departments /
jurisdictions

Designate lead agency

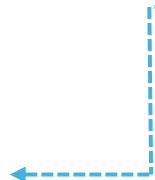
Identify stakeholders and cooperating entities

Establish range of concerns and values

Identify sites that
require physical /
chemical remediation
for restorative justice

Identify components of
restorative justice for
integration into post-
remediation land-use
planning

Proceed

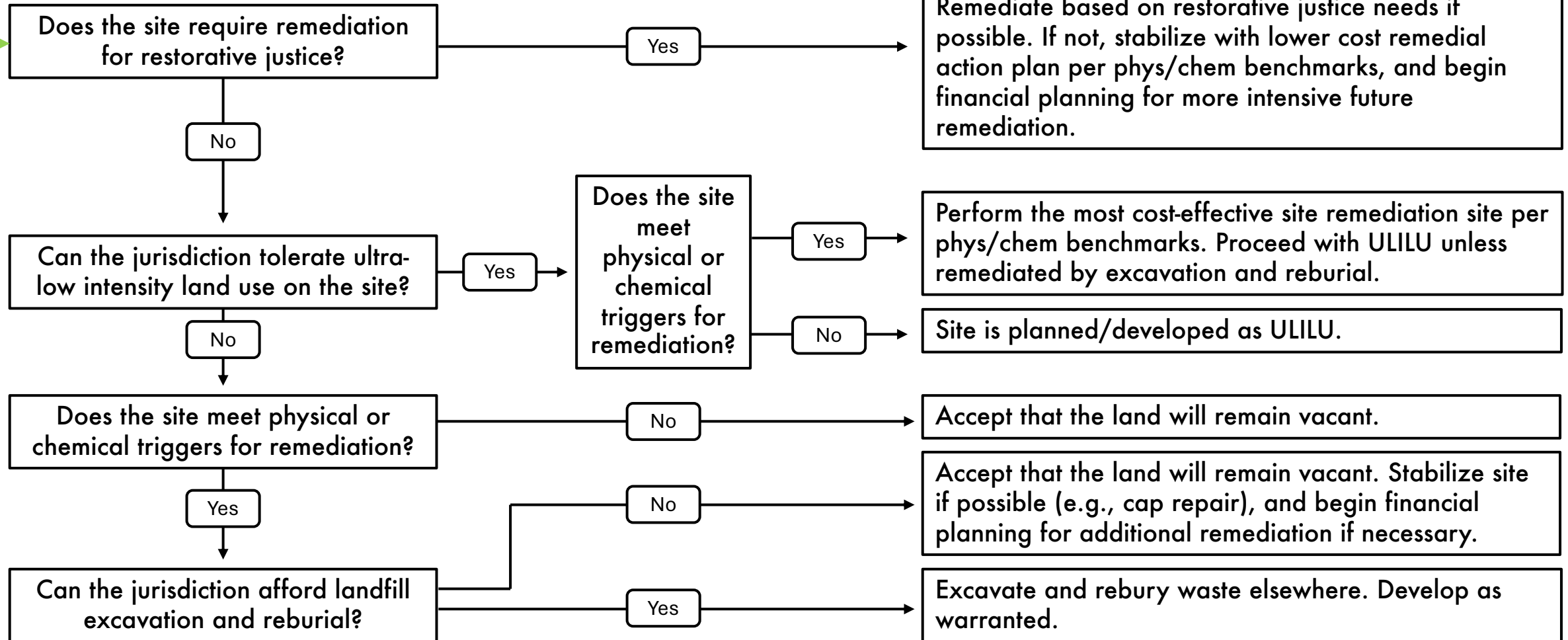


Evaluate sites against remediation and development criteria

2

Determine future land use and remediate accordingly

3



ULTRA LOW INTENSITY LAND USES FOR ULTRA HIGH EXCITEMENT

THE OBVIOUS ANSWER: PARKS/CONSERVATION/OPEN SPACE

- There's a reason why so many retired landfills become parks
- In Tucson, the locations are especially well-suited for parkland
- Did someone say "Urban National Wildlife Refuge?"

BUT DON'T FORGET...

- Tiny houses (no foundation = no slab!)
- Nimble commerce — food trucks, farmer's markets, pop-up markets, and more
- Solar farms, urban agriculture (including plant nurseries), mobile office space, performance space

ULTRA LOW INTENSITY LAND USES FOR ULTRA HIGH EXCITEMENT

THE OBVIOUS ANSWER:
PARKS/CONSERVATION OPEN SPACE

Fresh Kills Park (New York City)

There's a reason why so many retired
landfills become parks

- In Tucson, the locations are especially well-suited for parkland
- Did someone say "Urban National Wildlife Refuge?"

BUT DON'T FORGET...

Other Side Village (SLC)

- Tiny houses (no roads)

- Night
fa
m

**Informal commerce at A-Mountain
Landfill (Tucson, AZ — But it violated
city code)**

- Solar farms, urban agriculture
(in nurseries), mok
of

**Ocean Avenue Solar Park
(Portland, ME)**

**Goat grazing
pilot project
(Tucson, AZ)**

thank you for listening to
my talk



IN CONCLUSION

Landfill redevelopment is difficult.

Choose between an expensive project that will break ground in 20 years or an affordable project that can start now(-ish).

Opportunity costs of vacant sites can motivate jurisdictions to incentivize redevelopment ... but cleanup costs are paid at the expense of other opportunities,