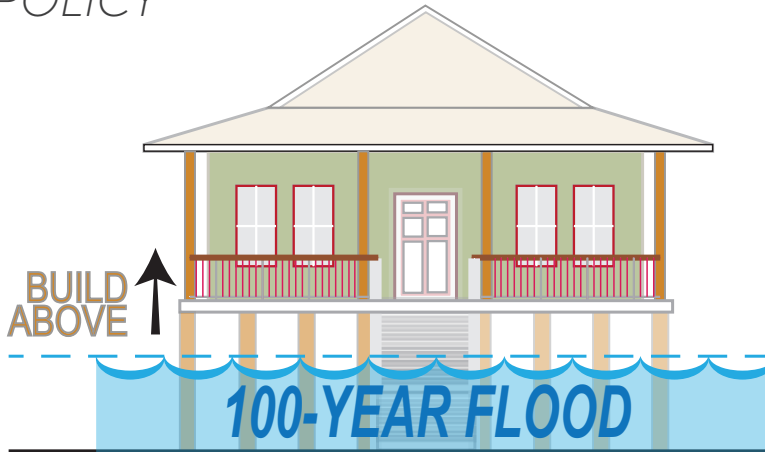


# ADOPT FREEBOARD

POLICY



Requires homes to be elevated above estimated 100-year flood levels

Manages: 1



Costs: 0



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RURAL



# ADOPT FREEBOARD




## PROS

- Minimizes financial impact of flood events
- Earns CRS points

## CONS

- Potential public resistance from homebuilders/developers
- Increased cost of building

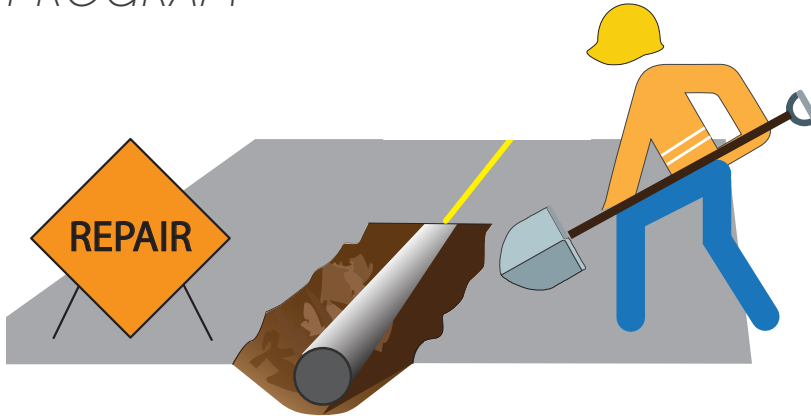
*Regional Comparison:*

*Suburban: 1* 

*Urban: 1* 

# MAINTAIN DRAINAGE INFRASTRUCTURE

*PROGRAM*



Maintenance required to ensure the functionality of existing drainage system

Manages: 3



Costs: 4



# MAINTAIN DRAINAGE INFRASTRUCTURE

## PROS

- Maintains level of service

## CONS

- May be outdated
- Limited adaptability to changing conditions

*Regional Comparison:*

*Suburban: 3💧, 4🕒*

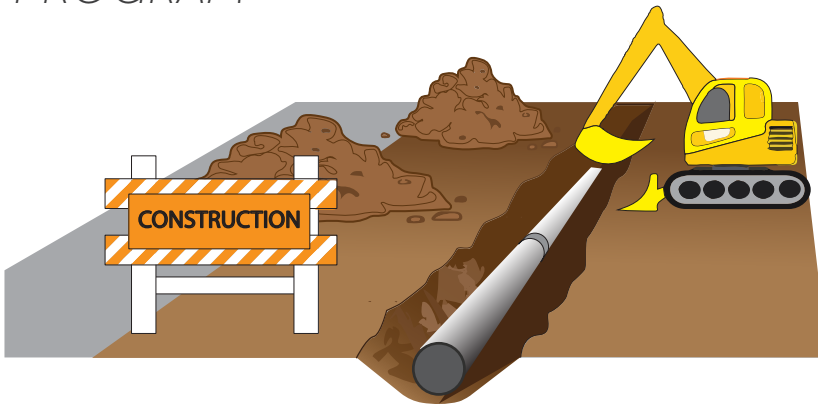
*Urban: 3💧, 4🕒*

RURAL



# EXPAND DRAINAGE INFRASTRUCTURE

PROGRAM



Expand the capacity of existing drainage systems

Manages: 2



Costs: 4



# EXPAND DRAINAGE INFRASTRUCTURE



## PROS

- Can handle large quantities of stormwater

## CONS

- Impacts downstream neighbors
- Requires additional maintenance
- Limited adaptability

*Regional Comparison:*

*Suburban: 2 , 4 *

*Urban: 2 , 4 *

RURAL



# CONSERVE AND/OR RESTORE NATURAL AREAS

PROGRAM



Preserves natural areas and other open spaces to store/slow down stormwater

Manages: 3



Costs: 2



# CONSERVE AND/OR RESTORE NATURAL AREAS



## PROS



- Maintains natural landscape storage capacity
- Provides recreation and ecotourism opportunities
- Maintains habitat and ecosystem services

## CONS

- Potential resistance from property owners and developers

*Regional Comparison:*

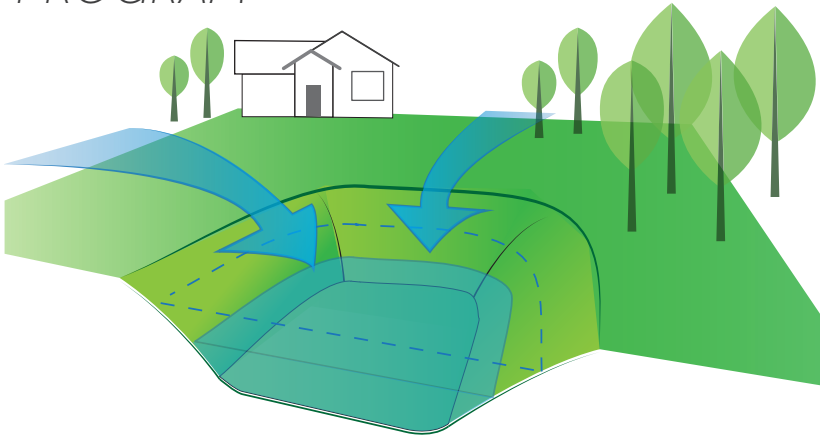
*Suburban: 2* , 2 

*Urban: 1* , 2 



# CONSTRUCT LARGE SCALE DETENTION FEATURE

*PROGRAM*



Uses open space to engineer a feature designed to detain excess stormwater

Manages: 3



Costs: 1



# CONSTRUCT LARGE SCALE DETENTION FEATURE



## PROS



- Can be recreational asset

## CONS

- Requires maintenance
- Impacts wildlife and natural habitat

*Regional Comparison:*

*Suburban: 2 , 2 *

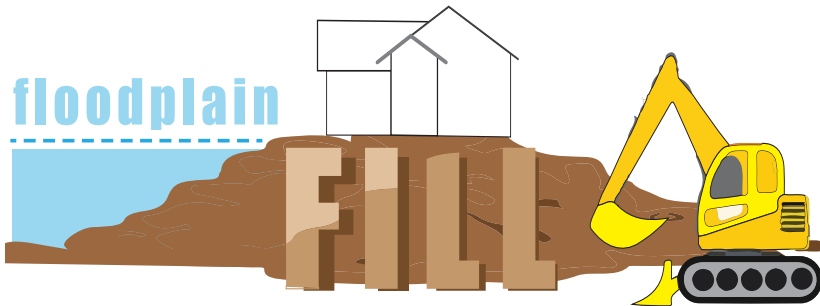
*Urban: 1 , 3 *

RURAL



# RESTRICT FILL IN FLOODPLAIN

*POLICY*



Limits the amount of fill that can be used to elevate structures in the floodplain

Manages: 1



Costs: 0



# RESTRICT FILL IN FLOODPLAIN


## PROS

- Maintains floodplain storage capacity
- Reduces grey infrastructure needs
- Maintains habitat
- Maintains water quality
- Earns CRS points

## CONS

- Potential resistance from property owners
- Potential resistance from developers/builders
- Can increase building costs

*Regional Comparison:*

*Suburban: 2* 

*Urban: 1* 

RURAL



# INCREASE COMMUNITY REVENUE (TAXES/FEEES)

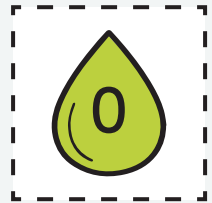
RURAL



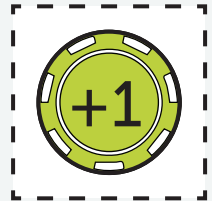
## REVENUE

Raises revenues through tax or utility rate increases

Manages: 0



Gain: +1



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# INCREASE COMMUNITY REVENUE (TAXES/FEEES)

## PROS


- Greater ability to fund risk-reducing efforts

## CONS

- Likely public resistance

*Regional Comparison:*

*Suburban: +2* 

*Urban: +3* 

RURAL



# PROGRAM FOR PRIVATE GREEN INFRASTRUCTURE

RURAL



*PROGRAM*



Incentivizes implementation of GI on private property with features designed to reduce runoff

Manages: 1



Costs: 1



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# PROGRAM FOR PRIVATE GREEN INFRASTRUCTURE

RURAL





## PROS



- Engages residents in shared stormwater management goals
- Potential for water quality improvements, improved aesthetics, increased property value

## CONS

- Effectiveness depends on private commitment to maintenance

*Regional Comparison:*

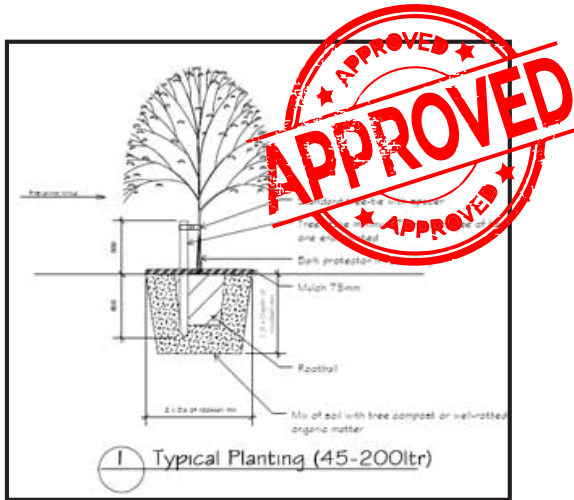
*Suburban: 2 , 1 *

*Urban: 2 , 1 *



# ADOPT/INCREASE STORM EVENT DESIGN STANDARDS

POLICY

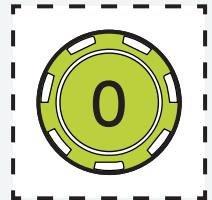


Design standards limit the amount of stormwater runoff from new development based on a particular storm event

Manages: 1



Costs: 0



# ADOPT/INCREASE STORM EVENT DESIGN STANDARDS

## PROS

- Reduces impact of new development
- Acknowledges the consequences of our actions

## CONS

- Potential public resistance by landowners and developers
- Increased costs for development
- Requires long-term maintenance

*Regional Comparison:*

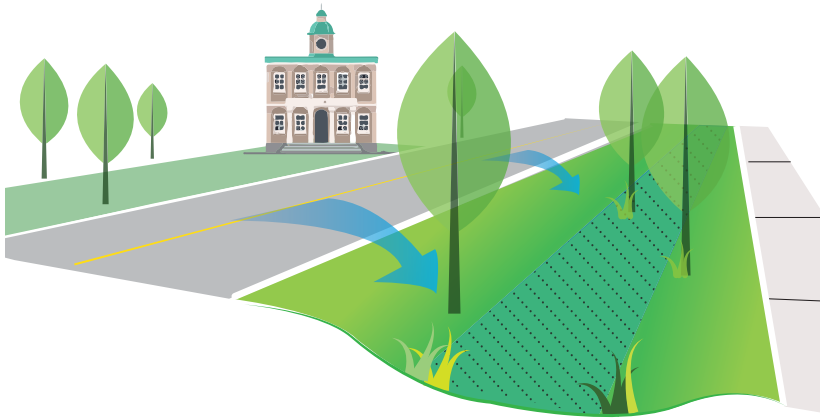
*Suburban: 1* 

*Urban: 1* 

# IMPLEMENT PUBLIC GREEN INFRASTRUCTURE

RURAL

*PROGRAM*



Incorporates green infrastructure into public infrastructure projects

Manages: 1



Costs: 3



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# IMPLEMENT PUBLIC GREEN INFRASTRUCTURE



## PROS

- Can improve the built environment and offer a public amenity
- Improves water quality of runoff

## CONS

- Requires maintenance

*Regional Comparison:*

*Suburban: 2 , 3 *

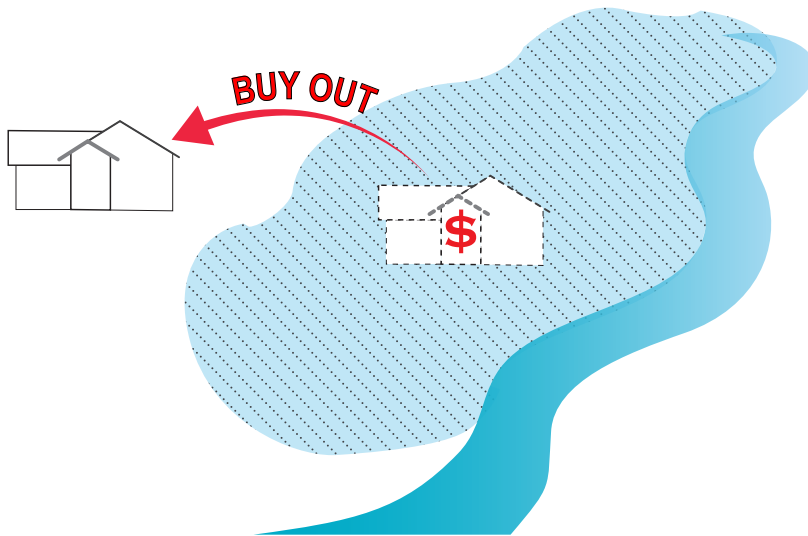
*Urban: 3 , 4 *

RURAL



# PRIVATE PROPERTY BUYOUT

PROGRAM

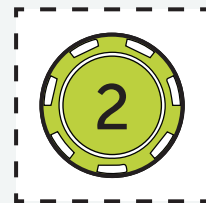


Buys out flood prone properties and returns land to natural state

Manages: 3



Costs: 2



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# PRIVATE PROPERTY BUYOUT

RURAL





## PROS



- Minimizes repetitive flood damages
- Increases natural storage capacity
- Improves public safety

## CONS

- Potential resistance from property owners

*Regional Comparison:*

*Suburban: 2 , 3 *

*Urban: 1 , 4 *

# CONDUCT EDUCATIONAL CAMPAIGN

RURAL



*PROGRAM*

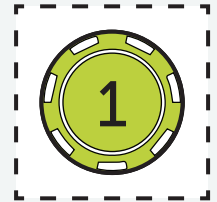


Informs residents about a chosen water management strategy to raise support and increase effectiveness.

Manages: +1



Costs: 1







# OTHER PROGRAM OR POLICY

RURAL



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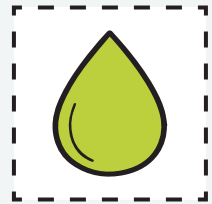
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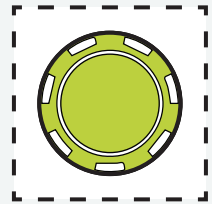


Have an idea for a policy or program to manage floodwater in your area?  
Write it in the space above.

Manages:



Costs:



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# ADOPT REGIONAL POLICY

REGIONAL

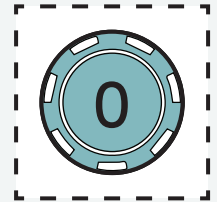


This card may be combined with one policy to reduce additional water. Upstream and/or downstream partners must agree to policy adoption.

Manages: 1



Costs: 0





# IMPLEMENT REGIONAL PROGRAM

REGIONAL

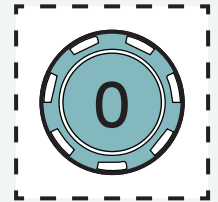


This card may be combined with one program to reduce additional water. Upstream and/or downstream partners must agree to coordinated program implementation.

Manages: 1



Costs: 0





# IMPLEMENT OTHER REGIONAL STRATEGY

REGIONAL

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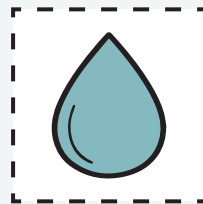
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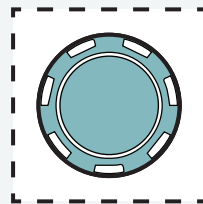


Upstream and/or downstream partners must agree to coordinated approach.

Manages:



Costs:



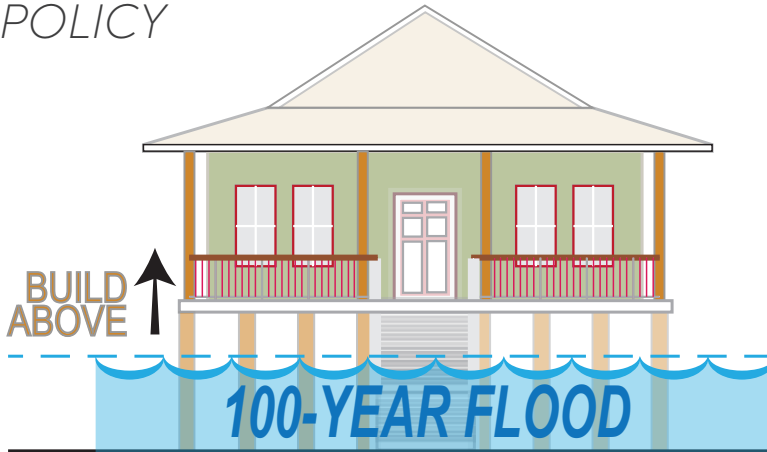
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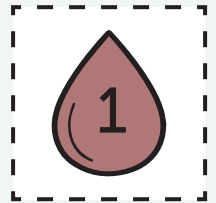
# ADOPT FREEBOARD

*POLICY*

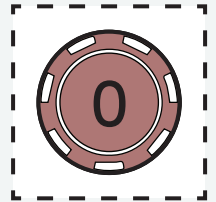


Requires homes to be elevated above estimated 100-year flood levels

Manages: 1



Costs: 0



# ADOPT FREEBOARD

## PROS

- Minimizes financial impact of flood events
- Earns CRS points

## CONS

- Potential public resistance from homebuilders/developers
- Increased cost of building

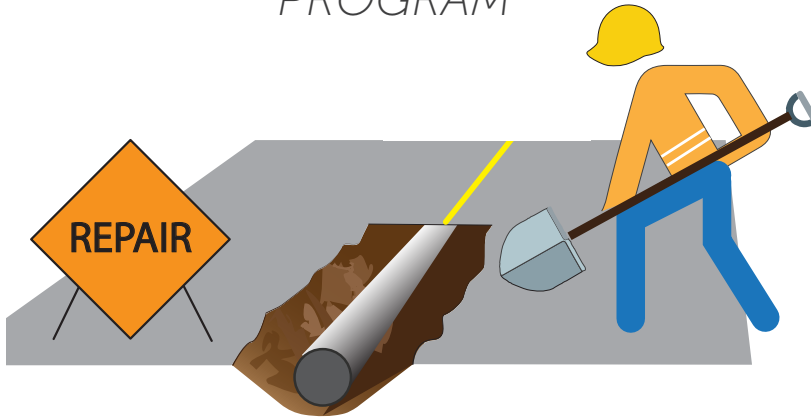
*Regional Comparison:*

*Rural: 1* 

*Urban: 1* 

# MAINTAIN DRAINAGE INFRASTRUCTURE

*PROGRAM*

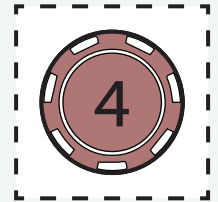


Maintenance required to ensure the functionality of existing drainage system

Manages: 3



Costs: 4



# MAINTAIN DRAINAGE INFRASTRUCTURE

## PROS

- Maintains level of service

## CONS

- May be outdated
- Limited adaptability to changing conditions

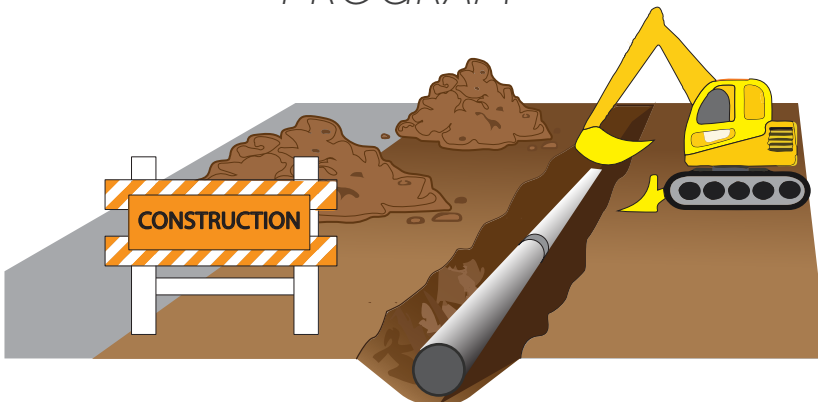
*Regional Comparison:*

*Rural: 3 , 4 *

*Urban: 3 , 4 *

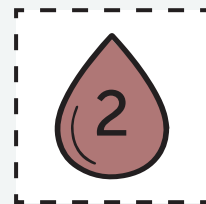
# EXPAND DRAINAGE INFRASTRUCTURE

PROGRAM

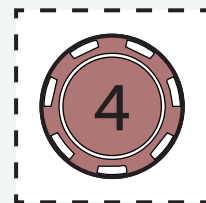


Expand the capacity of existing drainage systems

Manages: 2



Costs: 4



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# EXPAND DRAINAGE INFRASTRUCTURE

## PROS

- Can handle large quantities of stormwater

## CONS

- Impacts downstream neighbors
- Requires additional maintenance
- Limited adaptability

*Regional Comparison:*

*Rural: 2 , 4 *

*Urban: 2 , 4 *

# CONSERVE AND/OR RESTORE NATURAL AREAS

PROGRAM

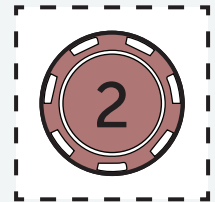


Preserves natural areas and other open spaces to store/slow down stormwater

Manages: 2



Costs: 2



# CONSERVE AND/OR RESTORE NATURAL AREAS


## PROS



- Maintains natural landscape storage capacity
- Provides recreation and ecotourism opportunities
- Maintains habitat and ecosystem services

## CONS

- Potential resistance from property owners and developers

*Regional Comparison:*

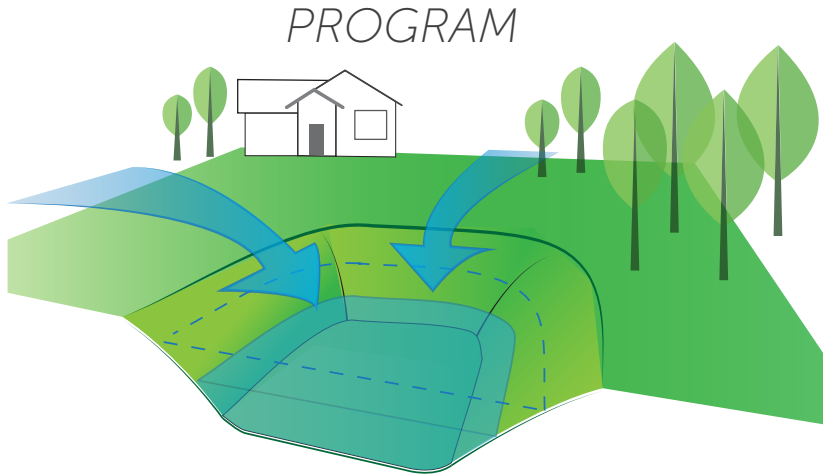
*Rural: 3 , 2 *

*Urban: 1 , 2 *



# CONSTRUCT LARGE SCALE DETENTION FEATURE

SUBURBAN

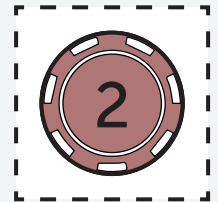


Uses open space to engineer a feature designed to detain excess stormwater

Manages: 2



Costs: 2



# CONSTRUCT LARGE SCALE DETENTION FEATURE

## PROS



- Can be recreational asset

## CONS

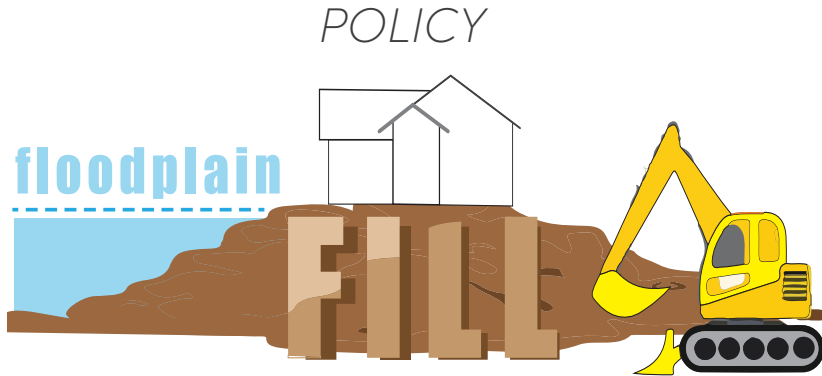
- Requires maintenance
- Impacts wildlife and natural habitat

*Regional Comparison:*

*Rural: 3 , 1 *

*Urban: 1 , 3 *

# RESTRICT FILL IN FLOODPLAIN

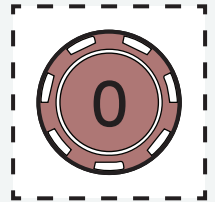


Limits the amount of fill that can be used to elevate structures in the floodplain

Manages: 2



Costs: 0



# RESTRICT FILL IN FLOODPLAIN

## PROS

- Maintains floodplain storage capacity
- Reduces grey infrastructure needs
- Maintains habitat
- Maintains water quality
- Earns CRS points

## CONS

- Potential resistance from property owners
- Potential resistance from developers/builders
- Can increase building costs

*Regional Comparison:*

*Rural: 1* 

*Urban: 1* 



# INCREASE COMMUNITY REVENUE (TAXES/FEEES)

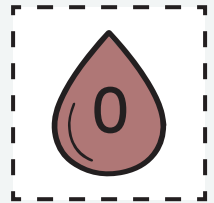
SUBURBAN



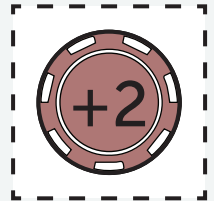
**REVENUE**

Raises revenues through tax or utility rate increases

Manages: 0



Gain: +2



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**EXCELLENCE**

# INCREASE COMMUNITY REVENUE (TAXES/FEES)


## PROS


- Greater ability to fund risk-reducing efforts

## CONS

- Likely public resistance

*Regional Comparison:*

*Rural: +1* 

*Urban: +3* 



# PROGRAM FOR PRIVATE GREEN INFRASTRUCTURE

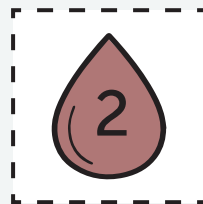
SUBURBAN

*PROGRAM*

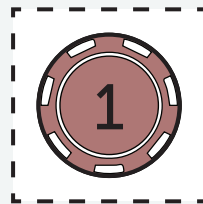


Incentivizes implementation of GI on private property with features designed to reduce runoff

Manages: 2



Costs: 1



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# PROGRAM FOR PRIVATE GREEN INFRASTRUCTURE



## PROS

- Engages residents in shared stormwater management goals
- Potential for water quality improvements, improved aesthetics, increased property value

## CONS

- Effectiveness depends on private commitment to maintenance

*Regional Comparison:*

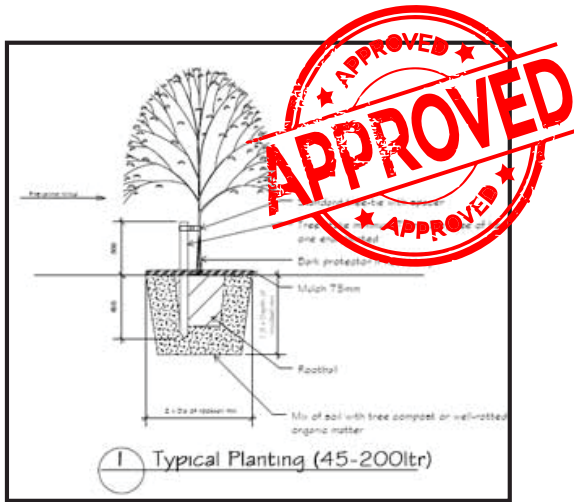
Rural: 1 , 1 

Urban: 2 , 1 



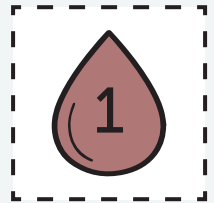
# ADOPT/INCREASE STORM EVENT DESIGN STANDARDS

POLICY

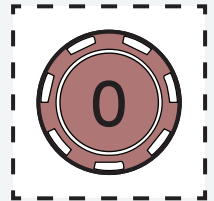


Design standards limit the amount of stormwater runoff from new development based on a particular storm event

Manages: 1



Costs: 0



# ADOPT/INCREASE STORM EVENT DESIGN STANDARDS


## PROS

- Reduces impact of new development
- Acknowledges the consequences of our actions

## CONS

- Potential public resistance by landowners and developers
- Increased costs for development
- Requires long-term maintenance

*Regional Comparison:*

*Suburban: 1* 

*Urban: 1* 

# IMPLEMENT PUBLIC GREEN INFRASTRUCTURE

SUBURBAN

*PROGRAM*

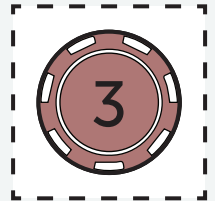


Incorporates green infrastructure into public infrastructure projects

Manages: 2



Costs: 3



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# IMPLEMENT PUBLIC GREEN INFRASTRUCTURE



## PROS

- Can improve the built environment and offer a public amenity
- Improves water quality of runoff

## CONS

- Requires maintenance

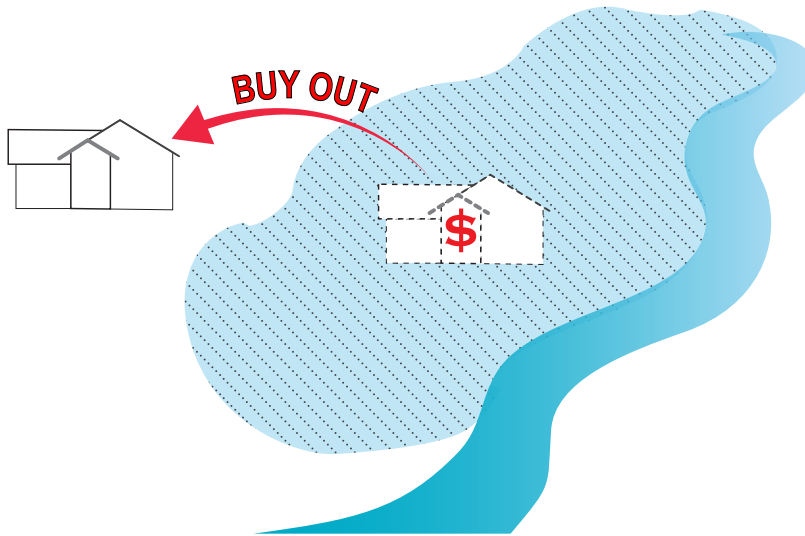
*Regional Comparison:*

Rural: 1 , 3 

Urban: 3 , 4 

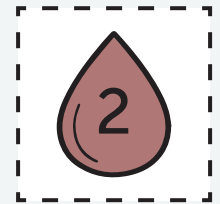
# PRIVATE PROPERTY BUYOUT

PROGRAM

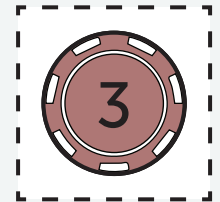


Buys out flood prone properties and returns land to natural state

Manages: 2



Costs: 3



# PRIVATE PROPERTY BUYOUT

## PROS



- Minimizes repetitive flood damages
- Increases natural storage capacity
- Improves public safety

## CONS

- Potential resistance from property owners

*Regional Comparison:*

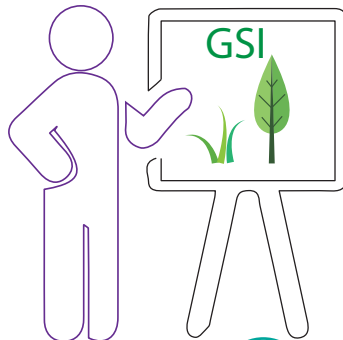
*Rural: 3 , 2 *

*Urban: 1 , 4 *

# CONDUCT EDUCATIONAL CAMPAIGN

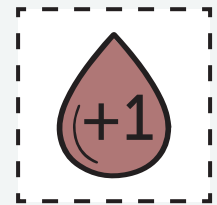
SUBURBAN

PROGRAM

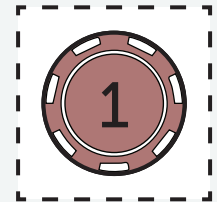


Informs residents about a chosen water management strategy to raise support and increase effectiveness.

Manages: +1



Costs: 1







# OTHER PROGRAM OR POLICY

SUBURB



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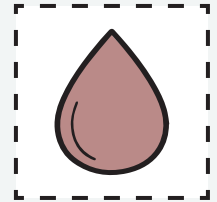
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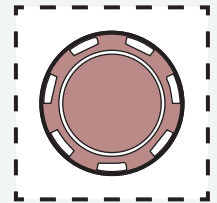


Have an idea for a policy or program to manage floodwater in your area?  
Write it in the space above.

Manages:



Costs:



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# ADOPT REGIONAL POLICY

REGIONAL

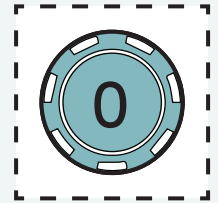


This card may be combined with one policy to reduce additional water. Upstream and/or downstream partners must agree to policy adoption.

Manages: 2



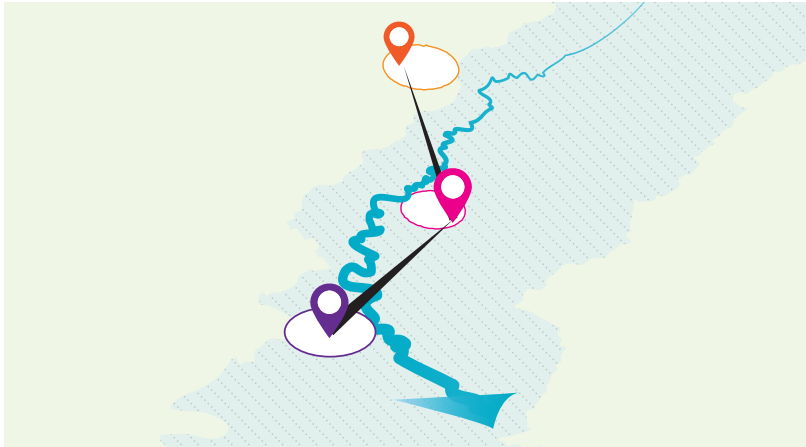
Costs: 0





# IMPLEMENT REGIONAL PROGRAM

REGIONAL

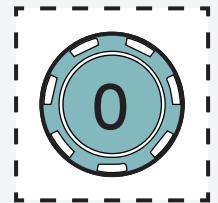


This card may be combined with one program to reduce additional water. Upstream and/or downstream partners must agree to coordinated program implementation.

Manages: 2



Costs: 0





# IMPLEMENT OTHER REGIONAL STRATEGY

REGIONAL

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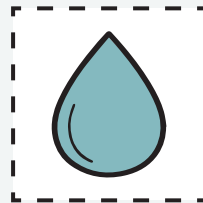
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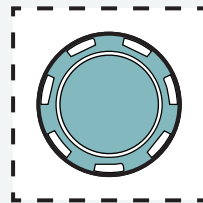


Upstream and/or downstream partners must agree to coordinated approach.

Manages:



Costs:



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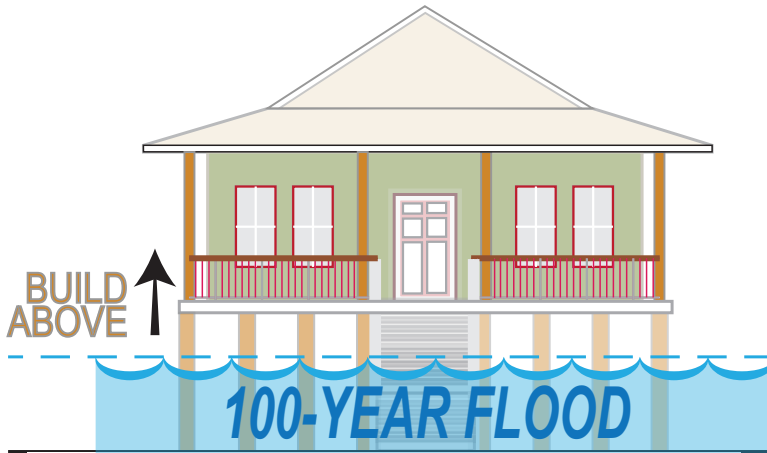


# ADOPT FREEBOARD

URBAN



*POLICY*

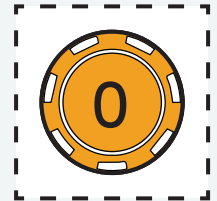


Requires homes to be elevated above estimated 100-year flood levels

Manages: 1



Costs: 0



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# ADOPT FREEBOARD

## PROS

- Minimizes financial impact of flood events
- Earns CRS points

## CONS

- Potential public resistance from homebuilders/developers
- Increased cost of building

*Regional Comparison:*

*Rural: 1* 🚰

*Suburban: 1* 🚰

URBAN

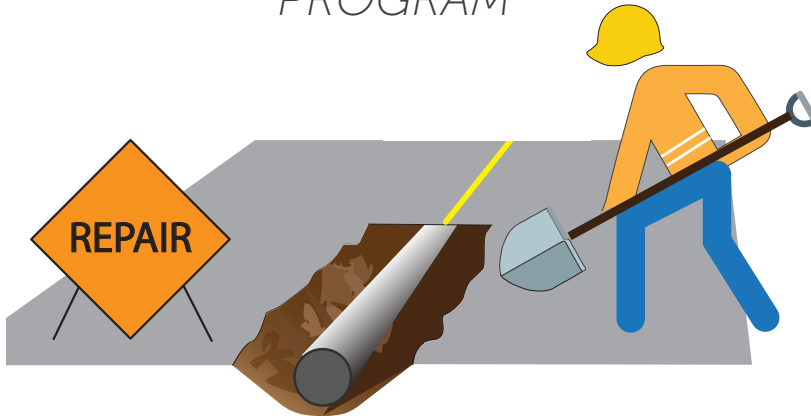


# MAINTAIN DRAINAGE INFRASTRUCTURE

URBAN



*PROGRAM*



Maintenance required to ensure the functionality of existing drainage system

Manages: 3



Costs: 4



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# MAINTAIN DRAINAGE INFRASTRUCTURE

## PROS

- Maintains level of service

## CONS

- May be outdated
- Limited adaptability to changing conditions

*Regional Comparison:*

*Rural: 3 , 4 *

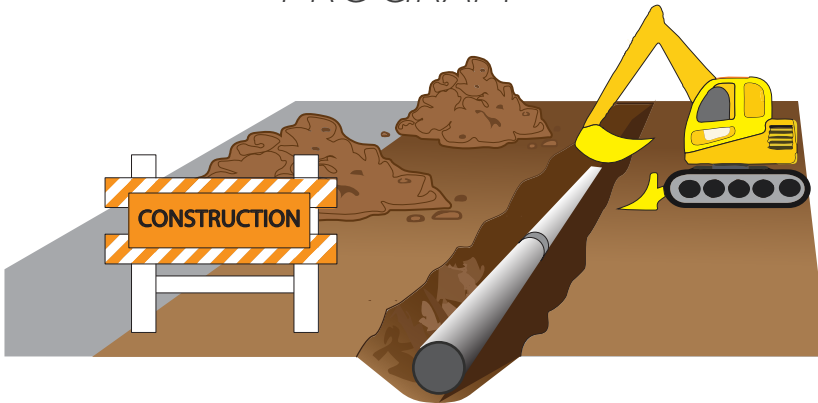
*Suburban: 3 , 4 *

URBAN



# EXPAND DRAINAGE INFRASTRUCTURE

PROGRAM



Expand the capacity of existing drainage systems

Manages: 2



Costs: 4



# EXPAND DRAINAGE INFRASTRUCTURE

## PROS



- Can handle large quantities of stormwater

## CONS

- Impacts downstream neighbors
- Requires additional maintenance
- Limited adaptability

*Regional Comparison:*

*Rural: 2 , 4 *

*Suburban: 2 , 4 *

URBAN



# CONSERVE AND/OR RESTORE NATURAL AREAS

PROGRAM



Preserves natural areas and other open spaces to store/slow down stormwater

Manages: 1



Costs: 2



# CONSERVE AND/OR RESTORE NATURAL AREAS


## PROS

- Maintains natural landscape storage capacity
- Provides recreation and ecotourism opportunities
- Maintains habitat and ecosystem services

## CONS

- Potential resistance from property owners and developers

*Regional Comparison:*

*Rural: 3 , 2 *

*Suburban: 2 , 2 *

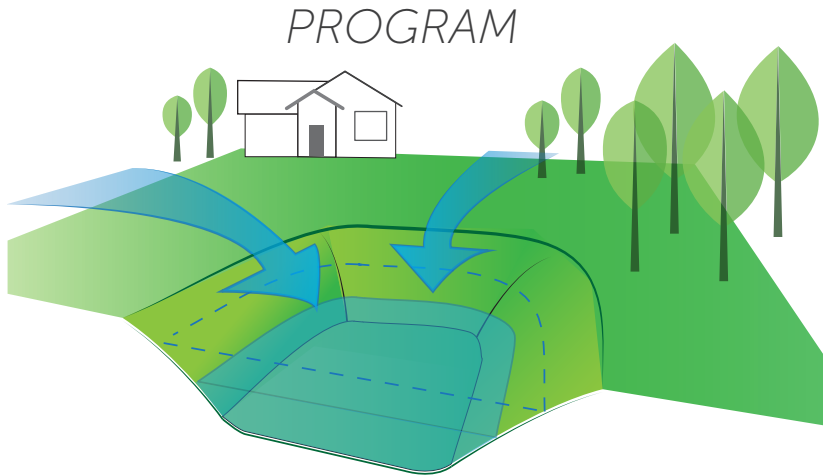
URBAN





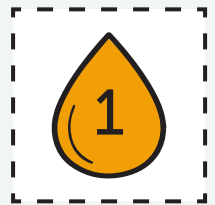
# CONSTRUCT LARGE SCALE DETENTION FEATURE

URBAN



Uses open space to engineer a feature designed to detain excess stormwater

Manages: 1



Costs: 3



# CONSTRUCT LARGE SCALE DETENTION FEATURE



## PROS


- Can be recreational asset

## CONS

- Requires maintenance
- Impacts wildlife and natural habitat

*Regional Comparison:*

*Rural: 3 , 1 *

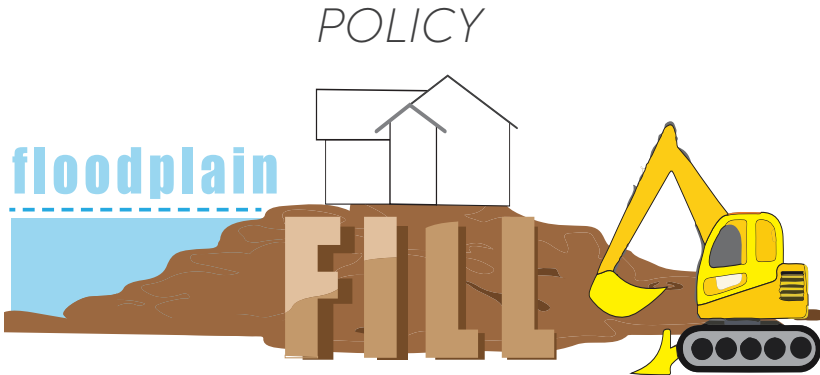
*Suburban: 2 , 2 *

URBAN



# RESTRICT FILL IN FLOODPLAIN

URBAN

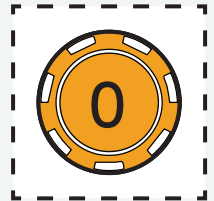


Limits the amount of fill that can be used to elevate structures in the floodplain

Manages: 1



Costs: 0



# RESTRICT FILL IN FLOODPLAIN

## PROS


- Maintains floodplain storage capacity
- Reduces grey infrastructure needs
- Maintains habitat
- Maintains water quality
- Earns CRS points

## CONS

- Potential resistance from property owners
- Potential resistance from developers/builders
- Can increase building costs

*Regional Comparison:*

*Rural: 1* 

*Suburban: 2* 

URBAN



# INCREASE COMMUNITY REVENUE (TAXES/FEEES)

URBAN



## REVENUE

Raises revenues through tax or utility rate increases

Manages: 0



Gain: +3



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# INCREASE COMMUNITY REVENUE (TAXES/FEEES)


## PROS

- Greater ability to fund risk-reducing efforts

## CONS

- Likely public resistance

*Regional Comparison:*

*Rural: +1* 

*Suburban: +2* 

URBAN



# PROGRAM FOR PRIVATE GREEN INFRASTRUCTURE

URBAN



*PROGRAM*

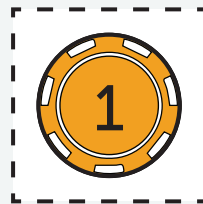


Incentivizes implementation of GI on private property with features designed to reduce runoff

Manages: 2



Costs: 1



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# PROGRAM FOR PRIVATE GREEN INFRASTRUCTURE



## PROS


- Engages residents in shared stormwater management goals
- Potential for water quality improvements, improved aesthetics, increased property value

## CONS

- Effectiveness depends on private commitment to maintenance

*Regional Comparison:*

Rural: 1 , 1 

Suburban: 2 , 1 

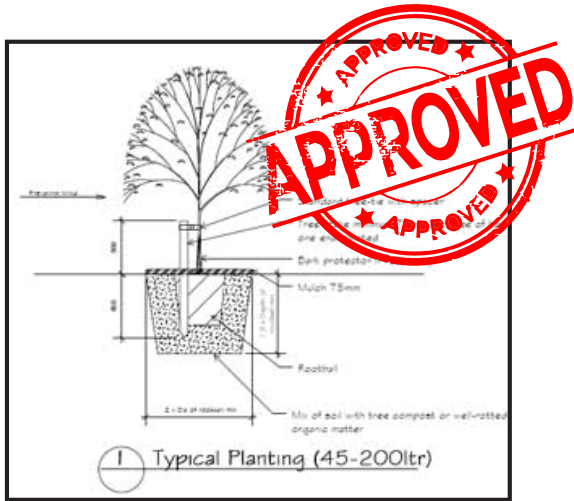
URBAN





# ADOPT/INCREASE STORM EVENT DESIGN STANDARDS

POLICY

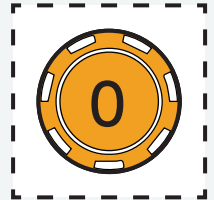


Design standards limit the amount of stormwater runoff from new development based on a particular storm event

Manages: 1



Costs: 0



# ADOPT/INCREASE STORM EVENT DESIGN STANDARDS

## PROS

- Reduces impact of new development
- Acknowledges the consequences of our actions

## CONS

- Potential public resistance by landowners and developers
- Increased costs for development
- Requires long-term maintenance

*Regional Comparison:*

*Rural: 1* 

*Suburban: 1* 

URBAN

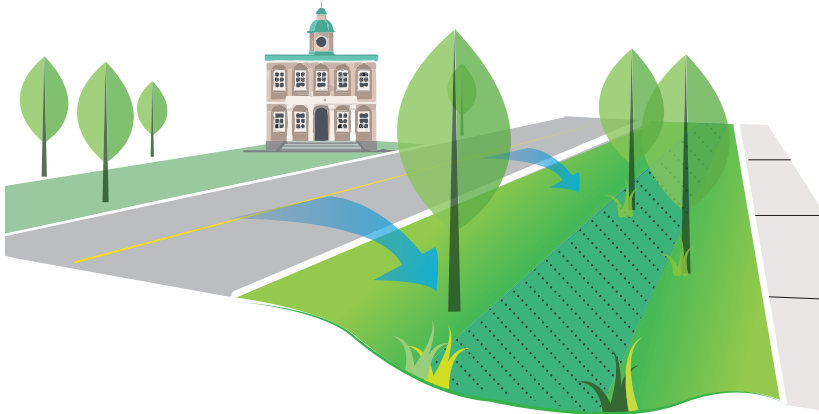


# IMPLEMENT PUBLIC GREEN INFRASTRUCTURE

URBAN



*PROGRAM*



Incorporates green infrastructure into public infrastructure projects

Manages: 3



Costs: 4



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# IMPLEMENT PUBLIC GREEN INFRASTRUCTURE

## PROS



- Can improve the built environment and offer a public amenity
- Improves water quality of runoff

## CONS

- Requires maintenance

*Regional Comparison:*

Rural: 1 , 3 

Suburban: 2 , 3 

URBAN

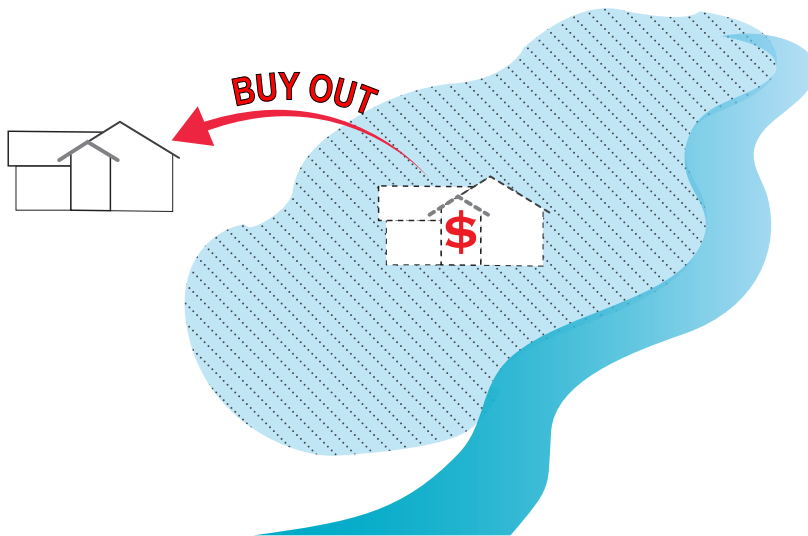


# PRIVATE PROPERTY BUYOUT

URBAN



PROGRAM

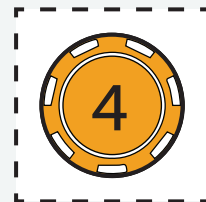


Buys out flood prone properties and returns land to natural state

Manages: 1



Costs: 4



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# PRIVATE PROPERTY BUYOUT

## PROS



- Minimizes repetitive flood damages
- Increases natural storage capacity
- Improves public safety

## CONS

- Potential resistance from property owners

*Regional Comparison:*

*Rural: 3 , 2 *

*Suburban: 2 , 3 *

URBAN

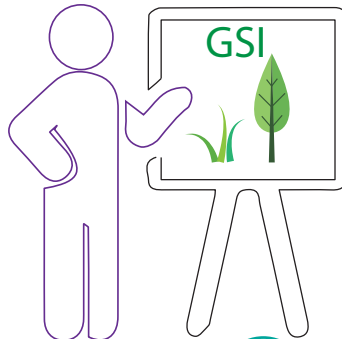


# CONDUCT EDUCATIONAL CAMPAIGN

URBAN



PROGRAM

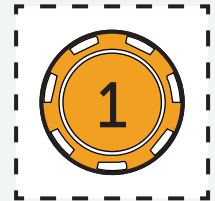


Informs residents about a chosen water management strategy to raise support and increase effectiveness.

Manages: +1



Costs: 1



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# OTHER POLICY OR PROGRAM

URBAN



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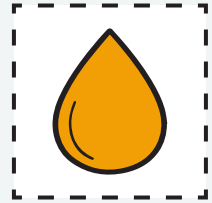
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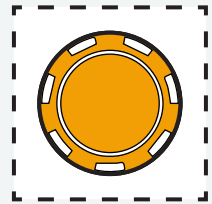


Have an idea for a policy or program to manage floodwater in your area?  
Write it in the space above.

Manages:



Costs:



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# ADOPT REGIONAL POLICY

REGIONAL

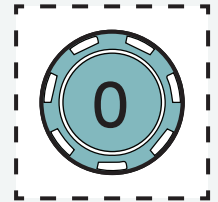


This card may be combined with one policy to reduce additional water. Upstream and/or downstream partners must agree to policy adoption.

Manages: 3



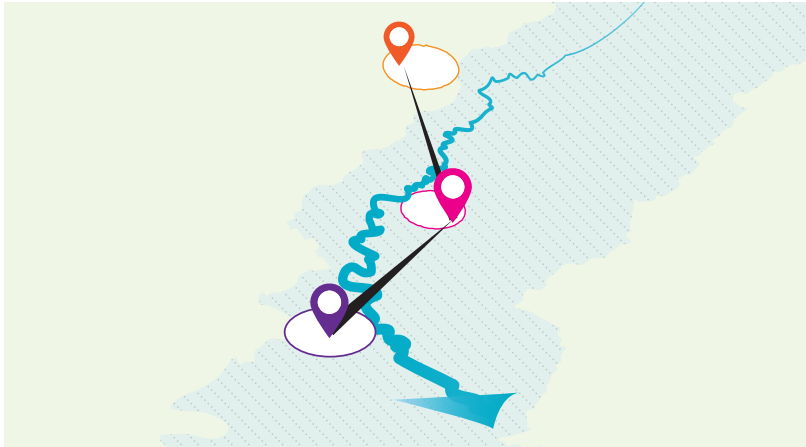
Costs: 0





# IMPLEMENT REGIONAL PROGRAM

REGIONAL

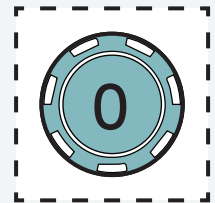


This card may be combined with one program to reduce additional water. Upstream and/or downstream partners must agree to coordinated program implementation.

Manages: 3



Costs: 0





# IMPLEMENT OTHER REGIONAL STRATEGY

REGIONAL

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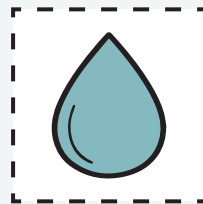
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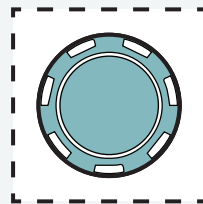


Upstream and/or downstream partners must agree to coordinated approach.

Manages:



Costs:



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