



Audubon ARIZONA

RIVER PATHWAYS

Across the arid landscape of Arizona, riverside habitats, or *Riparian Areas*, provide vital resources to humans and wildlife alike. Their flowing water and the shaded, vegetation rich habitats they support make activities like cattle ranching, mining, outdoor recreation, and urban expansion all possible - while still providing critical habitat for over 70 percent of the state's endangered wildlife.

On Arizona's public lands, through which many of the state's rivers flow, it is the job of *Resource Managers* to monitor the impacts of all of these activities and ensure that no one use pushes out another. Since these lands are public, it is mandated that no one user's impacts may ever prevent another user, whether human or animal, from using the land.

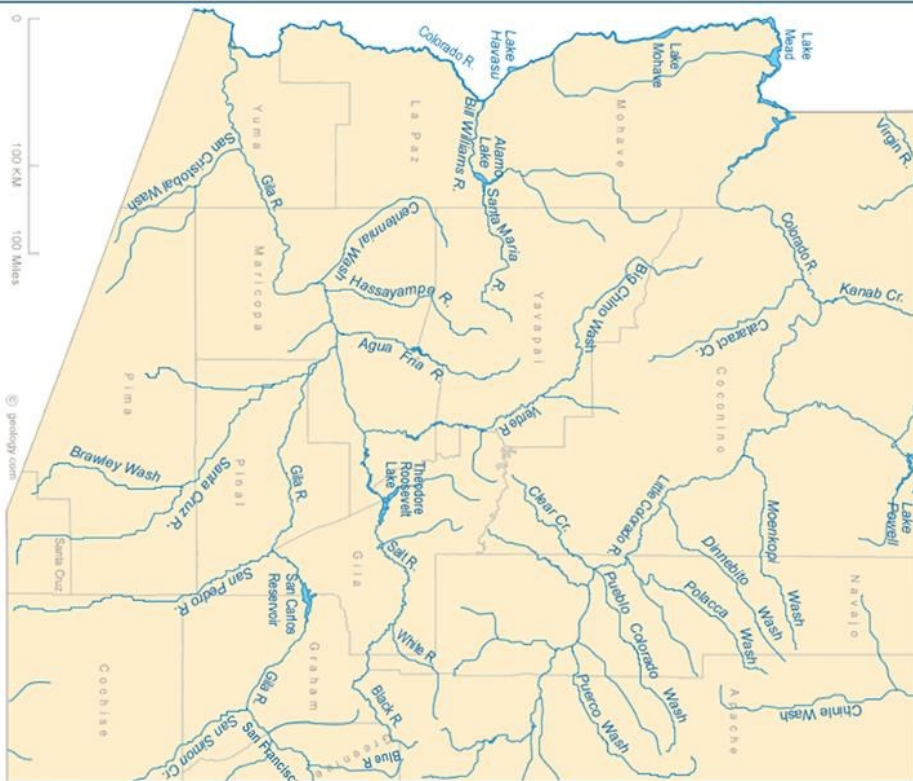
In riparian areas, where resources are concentrated and space is limited, this balancing act can become especially tricky. In this game, you're a resource manager trying to protect Arizona's rivers, but western rivers are complex and sometimes, despite your best efforts, disasters will happen.

Try your best to protect our rivers and save as many birds as you can along the way. Good luck!



aps | aps foundation

Arizona's Rivers



Birds of Management Concern

On each Bird Card, you will find the bird's "Conservation Status". These rankings were taken from the United States Fish and Wildlife Service's list "Birds of Management Concern and Focal Species", published in 2011. This is a list of species, subspecies, populations, or geographic segments of populations that warrant management or conservation attention. For more information, please visit <http://www.fws.gov/migratorybirds>.



Acknowledgements

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Photo Credits:

Agua Fria River (River Card back): Tim Flood, 2013, Agua Fria River with intern (Observation Card back) Sara Goodnick, 2012, Blue River, Steven Prager, 2012

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Colorado River: A. E. Crane, <http://byways.org>, Agua Fria River: Cliff Herold, <http://www.arwater.gov>, Salt

River: <http://www.arwater.gov>, Verde River: Dan Healy, www.riversnau.edu, Gila River: <http://www.arwater.gov>, Little

Colorado River: <http://www.gcdamp.gov>, Western yellow-billed cuckoo: <https://en.wikipedia.org/wiki/File:Coccyzusamericanus001.jpg>, Bell's vireo: Dominic Sherony 2009, http://commons.wikimedia.org/wiki/File:bell's_vireo.jpg, Common black-hawk: Sebastian Re-spre-pa-Calle, 2012, <http://www.flickr.com/photos/donsdbs/8181018847/>, Yellow-breasted chat: Jim Corradi, 2009, <http://commons.wikimedia.org/wiki/File:Yellowbreastedchat.jpg>, Yuma dapper rail: USFWS, <http://www.fws.gov/>, Bald eagle: Steve

Bernard, 2010, [https://commons.wikimedia.org/wiki/File:Bald_Eagle_\(Halictetus_leucoccephalus\).jpg](https://commons.wikimedia.org/wiki/File:Bald_Eagle_(Halictetus_leucoccephalus).jpg),

Southwest willowflycatcher: Utah Division of Wildlife Resources, <http://dwcrc.utah.gov>

RULES OF PLAY

CONTENTS:

120 Cards

42 River Cards

- 34 Rivers
- 8 Disasters

78 Observation Cards

- 43 Monitoring Cards
 - 32 Indicators
 - 10 Setbacks
 - 1 Wild Card
- 21 Action Cards
- 14 Bird Cards



OBJECT:

To be the player with the most points (birds saved) when the game ends.

SETUP:

- Sort** the cards into two decks, identified on their backs as **River** or **Observation** cards, and shuffle each deck thoroughly. Place the **River** cards face down to one side.
- Deal** each player seven cards from the **Observation** deck and place the deck face down in the center as the draw pile. Played and discarded cards will sit face up in a discard pile next to the draw pile. Players should look at their cards. Check the bottom of all green **Monitoring** cards so you can tell if you have an **Indicator** or a **Setback**.

BASIC GAME PLAY:

- The player left of the dealer goes first. There are four ways to play on each of your turns.
 - PROTECT A RIVER.** Lay down three **Monitoring-Indicator** cards and take a **River** card. This is how you gain and lose points (see the box on the right).
 - ADD A BIRD CARD** to a **River** card (see box to the right).
 - PLAY AN ACTION CARD.** Most of these will be played against another player - any player. Follow the instructions on the card (see box to the right).
 - DISCARD** one card if you cannot do any of the above. This is one way to get rid of **Monitoring-Setback** cards.
- Draw enough cards from the **Observation** deck to bring your hand back up to seven cards. If you took a card from an opponent, he/she will need to draw a new card. If both players need to draw, the one who played first should draw first.

At the end of every turn, all players should have seven observation cards in-hand

- Play continues to the left (clockwise). If the draw pile runs out, reshuffle the discard pile and start a new draw pile.

WINNING:

The game ends when the first player gets 5 rivers. The winner is the one with the most points tallied from the **RIVER** and **BIRD** cards (see box to the right).

1) PROTECT A RIVER (earn points)

When you have collected three **monitoring-indicator** cards, each from a *different* category, you lay them on the discard pile to protect a river. **Categories: Water Quality, Bank Stability, Vegetation, and Flow.** There is one **Wild Card** that can substitute for any category **indicator**. Watch out for **Setbacks**: if you're caught trying to protect a river with one, you forfeit your turn - take back your cards and don't draw any new ones!

Next, draw a **River** card, say its name, and lay it face up in front of you. If you have drawn a disaster card, your turn ends. If you have drawn a river, look at the bottom for its associated birds. If you have any matching **Bird** cards in your hand, lay them on the **River** card for extra points.

You may add as many **Bird** cards to your **River** card as there are birds listed on the card, but no duplicates are allowed.

2) PLAY A BIRD CARD (earn points)

If you draw a **Bird** card later in the game that matches with one of your **River** cards, on another turn you may lay it on and get the extra points. This counts as your turn. Add only one bird per turn.

3) PLAYING AN ACTION CARD

STEALING A RIVER

Several of the **Action** cards allow you to steal another player's **River** card. If the other player can immediately play a blocking card by laying it on the discard pile, nothing happens. If the other player has no blocking card, you choose which **River** card to take. Any associated **Bird** cards stay with the **River** and come to you. You must wait until another turn to add any new **Birds**.

LOSING A RIVER

There is one "Invasive Species" card which you play to make another player lose one **River** card, returning it to the bottom of the **River** card pile. There is no blocking this card. The other player gets to choose which **River** card is discarded. Any associated **Birds** go to the discard pile. **Disaster** cards are never put back, but can be shifted to another player by a "Dishonest Politician" card.

DRAW UP TO TWO CARDS

Two **Action** cards allow you to draw up to two cards. When you play this card, you may then immediately draw a card and decide whether to keep it or discard it. If you keep it, your turn ends. If you discard it, you may draw another card and keep it.

TAKE ONE MONITORING CARD:

If you play one of these cards, choose a player who must give you one of his or her monitoring cards. Some of these cards are category-specific (Water Quality, Bank Stability, Vegetation, Flow). If the card does not specify, you choose the category. Beware, the other player may give you a **Setback**. The other player will then need to draw a card. If the other player does not have a monitoring card from the specified/requested category, you simply draw a card and your turn ends.

WINNING

When one player has protected 5 rivers (collected 5 **River** cards), play stops and each player counts up the total number of points in their River collection. When counting points, include **River**, **Disaster**, and **Bird** cards. The player with the most points wins.

If time is limited, you may wish to end the game when one player collects four **River** cards or after a set amount of time (we recommend at least 20 minutes). Alternately, play two or more games and add up the points from all games to find the ultimate winner - an honorary Resource Manager!

River Pathways

Audubon ARIZONA

River

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River

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River

DISASTER! -1

**A large dam
breaks upstream
and the river is
flooded!**

DISASTER! -4

**A metropolitan
area is growing
unsustainably and
needs more
water!**

DISASTER! -2

**Politicians ignore
evidence that
rivers are being
dewatered.**

DISASTER! -3

**Off-road vehicle
users fail to see
signage and are
trampling plants
along the river!**

DISASTER! -2

**Environmental
regulations are
lessened, allowing
for more industrial
activity along
Arizona's rivers.**

DISASTER! -1

**Agricultural
operations begin
producing crops
that require
extensive irrigation.**

DISASTER! -1

**Cattle fences
break during a
monsoon storm.
Cows are free to
graze on riparian
plants!**

DISASTER! -3

**Crayfish, an
invasive species,
are found in the
river!**

River Pathways

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River

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River

River Pathways

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River

San Pedro 6



Location in AZ: Cochise, Pima, Graham, and Pinal counties

Length: 150mi (241km)

BIRDS: western yellow-billed cuckoo, southwestern willow flycatcher, Bell's vireo

San Pedro 6



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San Pedro 6



Location in AZ: Cochise, Pima, Graham, and Pinal counties

Length: 150mi (241km)

BIRDS: western yellow-billed cuckoo, southwestern willow flycatcher, Bell's vireo

Colorado 2



Location in AZ: Yuma, La Paz, Coconino, and Mojave counties

Length: 1,450mi (2,334km)

BIRDS: Yuma clapper rail, bald eagle, western yellow-billed cuckoo

Colorado 2



Location in AZ: Yuma, La Paz, Coconino, and Mojave counties

Length: 1,450mi (2,334km)

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River

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Audubon ARIZONA

River

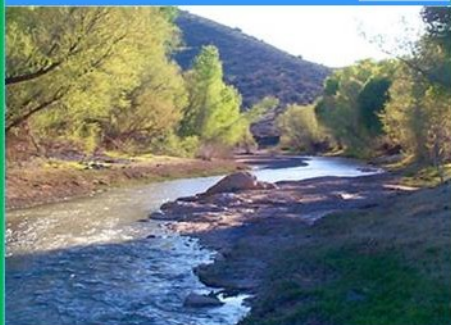
River Pathways

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River

Agua Fria

1



Location in AZ: Yavapi and Maricopa counties

Length: 120mi (190km)

BIRDS: western yellow-billed cuckoo, Bell's vireo, common black-hawk

Agua Fria

1



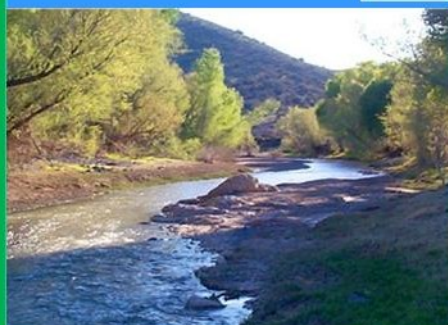
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Agua Fria

1



Location in AZ: Yavapi and Maricopa counties

Length: 120mi (190km)

BIRDS: western yellow-billed cuckoo, Bell's vireo, common black-hawk

Agua Fria

1



Location in AZ: Yavapi and Maricopa counties

Length: 120mi (190km)

BIRDS: western yellow-billed cuckoo, Bell's vireo, common black-hawk

Salt

3



Location in AZ: Gila and Maricopa counties

Length: 200mi (322km)

BIRDS: bald eagle, southwestern willow flycatcher, yellow-breasted chat

Salt

3



Location in AZ: Gila and Maricopa counties

Length: 200mi (322km)

BIRDS: bald eagle, southwestern willow flycatcher, yellow-breasted chat

Salt

3



Location in AZ: Gila and Maricopa counties

Length: 200mi (322km)

BIRDS: bald eagle, southwestern willow flycatcher, yellow-breasted chat

Salt

3



Location in AZ: Gila and Maricopa counties

Length: 200mi (322km)

BIRDS: bald eagle, southwestern willow flycatcher, yellow-breasted chat

River Pathways

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River

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River Pathways

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River

River Pathways

Audubon ARIZONA

River

Verde

5



Location in AZ: Coconino, Yavapi, and Maricopa counties

Length: 195mi (314km)

BIRDS: Bell's vireo, bald eagle, southwestern willow flycatcher

Verde

5



Location in AZ: Coconino, Yavapi, and Maricopa counties

Length: 195mi (314km)

BIRDS: Bell's vireo, bald eagle, southwestern willow flycatcher

Verde

5



Location in AZ: Coconino, Yavapi, and Maricopa counties

Length: 195mi (314km)

BIRDS: Bell's vireo, bald eagle, southwestern willow flycatcher

Gila

4



Location in AZ: Greenlee, Graham, Pinal, Maricopa, and Yuma counties

Length: 649mi (314km)

BIRDS: Yuma clapper rail, bald eagle, southwestern willow flycatcher, yellow-breasted chat

Gila

4



Location in AZ: Greenlee, Graham, Pinal, Maricopa, and Yuma counties

Length: 649mi (314km)

BIRDS: Yuma clapper rail, bald eagle, southwestern willow flycatcher, yellow-breasted chat

Gila

4



Location in AZ: Greenlee, Graham, Pinal, Maricopa, and Yuma counties

Length: 649mi (314km)

BIRDS: Yuma clapper rail, bald eagle, southwestern willow flycatcher, yellow-breasted chat

Santa Cruz

4



Location in AZ: Pinal and Santa Cruz counties

Length: 184mi (296km)

BIRDS: common black-hawk, Bell's vireo, western yellow-billed cuckoo

Santa Cruz

4



Location in AZ: Pinal and Santa Cruz counties

Length: 184mi (296km)

BIRDS: common black-hawk, Bell's vireo, western yellow-billed cuckoo

River Pathways

Audubon ARIZONA

River

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River Pathways

Audubon ARIZONA

River

River Pathways

Audubon ARIZONA

River

Santa Cruz 4



Location in AZ: Pinal and Santa Cruz counties

Length: 184mi (296km)

BIRDS: common black-hawk, Bell's vireo, western yellow-billed cuckoo

San Francisco 4



Location in AZ: Greenlee and Graham counties

Length: 159mi (256km)

BIRDS: southwestern willow flycatcher, yellow-breasted chat, common black-hawk

San Francisco 4



Location in AZ: Greenlee and Graham counties

Length: 159mi (256km)

BIRDS: southwestern willow flycatcher, yellow-breasted chat, common black-hawk

San Francisco 4



Location in AZ: Greenlee and Graham counties

Length: 159mi (256km)

BIRDS: southwestern willow flycatcher, yellow-breasted chat, common black-hawk

Blue 1



Location in AZ: Greenlee county

Length: 50.8mi (81.8km)

BIRDS: yellow-breasted chat, bald eagle, southwestern willow flycatcher

Blue 1



Location in AZ: Greenlee county

Length: 50.8mi (81.8km)

BIRDS: yellow-breasted chat, bald eagle, southwestern willow flycatcher

Blue 1



Location in AZ: Greenlee county

Length: 50.8mi (81.8km)

BIRDS: yellow-breasted chat, bald eagle, southwestern willow flycatcher

Little Colorado 3



Location in AZ: Apache, Navajo, and Coconino counties

BIRDS: yellow-breasted chat, bald eagle, southwestern willow flycatcher

River Pathways



Audubon ARIZONA

River

River Pathways



Audubon ARIZONA

River

River Pathways

Observation



Audubon ARIZONA

River Pathways

Observation



Audubon ARIZONA

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Observation



Audubon ARIZONA

River Pathways

Observation



Audubon ARIZONA

River Pathways

Observation



Audubon ARIZONA

River Pathways

Observation



Audubon ARIZONA

Common black-hawk
(*Buteo gallus anthracinus*)



Diet: Mostly fish, frogs and lizards

Fun Facts: Is at the northern edge of its range in the US. Wary at nest site and calls loudly if disturbed.

Conservation Status

Bird of Management Concern

2

Southwestern willow flycatcher

(*Empidonax traillii eximius*)



Diet: Primarily insects.

Fun Facts: Flycatcher songs are innate, meaning they are born knowing how to sing them and do not have to learn them like other songbirds.

Conservation Status

Endangered

2

Southwestern willow flycatcher

(*Empidonax traillii eximius*)



Diet: Primarily insects.

Fun Facts: Flycatcher songs are innate, meaning they are born knowing how to sing them and do not have to learn them like other songbirds.

Conservation Status

Endangered

2

Yuma clapper rail
(*Rallus longirostris yumanensis*)



Diet: Small fish, frogs, and crayfish

Fun Facts: Secretive. Declining due to loss of marsh habitat.

Conservation Status

Endangered

4

Little Colorado

3



Location in AZ: Apache, Navajo, and Coconino counties

BIRDS: yellow-breasted chat, bald eagle, southwestern willow flycatcher

Little Colorado

3



Location in AZ: Apache, Navajo, and Coconino counties

BIRDS: yellow-breasted chat, bald eagle, southwestern willow flycatcher

2

Bell's vireo
(*Vireo bellii*)



Diet: Mostly insects such as caterpillars, beetles, and wasps. Rarely berries.

Fun Facts: Forages off by gleaning insects off leaves. Common victim of cowbird parasitism.

Conservation Status

Bird of Management Concern

2

Common black-hawk
(*Buteo gallus anthracinus*)



Diet: Mostly fish, frogs and lizards

Fun Facts: Is at the northern edge of its range in the US. Wary at nest site and calls loudly if disturbed.

Conservation Status

Bird of Management Concern

River Pathways
Observation



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River Pathways
Observation



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Observation



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River Pathways
Observation



Audubon ARIZONA

River Pathways
Observation



Audubon ARIZONA

Bald eagle

(*Haliaeetus leucocephalus*)



Conservation Status

Removed from the threatened/
endangered list in 2007.
Populations recovering.

2

Diet: Mostly fish,
but occasionally eats
birds and mammals.

Fun Facts: Hunts
by watching prey
from a high perch.
Probably mates for
life.

Bald eagle

(*Haliaeetus leucocephalus*)



Conservation Status

Removed from the threatened/
endangered list in 2007.
Populations recovering.

2

Diet: Mostly fish,
but occasionally eats
birds and mammals.

Fun Facts: Hunts
by watching prey
from a high perch.
Probably mates for
life.

Bell's vireo

(*Vireo bellii*)



Conservation Status

Bird of Management Concern

2

Diet: Mostly insects
such as caterpillars,
beetles, and wasps.
Rarely berries.

Fun Facts: Forages
by gleaning insects off
leaves. Common
victim of cowbird
parasitism.

Bell's vireo

(*Vireo bellii*)



Conservation Status

Bird of Management Concern

2

Diet: Mostly insects
such as caterpillars,
beetles, and wasps.
Rarely berries.

Fun Facts: Forages
by gleaning insects off
leaves. Common
victim of cowbird
parasitism.

Western yellow-billed cuckoo

(*Coccyzus americanus occidentalis*)



Conservation Status

Threatened Status Pending

3

Diet: Large insects
such as cicadas,
grasshoppers, and
caterpillars

Fun Facts: Very
secretive. Nests in
response to monsoon
rains and is sometimes
called the "rain crow".

Western yellow-billed cuckoo

(*Coccyzus americanus occidentalis*)



Conservation Status

Threatened Status Pending

3

Diet: Large insects
such as cicadas,
grasshoppers, and
caterpillars

Fun Facts: Very
secretive. Nests in
response to monsoon
rains and is sometimes
called the "rain crow".

Yellow-breasted chat

(*Icteria virens*)



Conservation Status

Least Concern

2

Diet: Insects, such as
moths, beetles, and
grasshoppers. Some
berries.

Fun Facts: Song is a
bizarre series of
hoots and whistles.
Males and females
are identical.

Yellow-breasted chat

(*Icteria virens*)



Conservation Status

Least Concern

2

Diet: Insects, such as
moths, beetles, and
grasshoppers. Some
berries.

Fun Facts: Song is a
bizarre series of
hoots and whistles.
Males and females
are identical.

River Pathways
Observation



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River Pathways
Observation



Audubon ARIZONA

River Pathways
Observation



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Observation



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River Pathways
Observation



Audubon ARIZONA

MONITORING

Water Quality



Dissolved Oxygen

Cool waters are supporting high oxygen levels

INDICATOR

MONITORING

Water Quality



Dissolved Oxygen

Cool waters are supporting high oxygen levels

INDICATOR

MONITORING

Water Quality



pH Levels

Levels are stable and within the optimal range (6-7) to support aquatic life

INDICATOR

MONITORING

Water Quality



pH Levels

Levels are stable and within the optimal range (6-7) to support aquatic life

INDICATOR

MONITORING

Water Quality



Turbidity

Amount of suspended solids in the water is low and the water is clear

INDICATOR

MONITORING

Water Quality



Mining

Local mining operations adopt new methods that result in cleaner water

INDICATOR

MONITORING

Water Quality



Bad Data

Water testing results are inconsistent, suggesting problems with your equipment

SETBACK

MONITORING

Water Quality



Bad Data

Water testing results are inconsistent, suggesting problems with your equipment

SETBACK



MONITORING

Water Quality



Mine Tailings

Mine tailings are leaking directly into the river!

SETBACK

MONITORING

Water Quality



Equipment Failure

Dissolved oxygen meter wasn't calibrated correctly!

SETBACK

MONITORING

Bank Stability



Streamside Vegetation

The roots of dense riparian vegetation are effectively holding soil in place

INDICATOR

MONITORING

Bank Stability



Streamside Vegetation

The roots of dense riparian vegetation are effectively holding soil in place

INDICATOR

MONITORING

Bank Stability



Fencing

Fences are working! Damage to banks from cattle and off-road vehicles is reduced

INDICATOR

MONITORING

Bank Stability



Fencing

Fences are working! Damage to banks from cattle and off-road vehicles is reduced

INDICATOR

MONITORING

Bank Stability



Vehicles

A new jeep trail is built outside the riparian corridor. Now no one drives in the riverbed!

INDICATOR

MONITORING

Bank Stability



Vehicles

A new jeep trail is built outside the riparian corridor. Now no one drives in the riverbed!

INDICATOR



MONITORING

Bank Stability



Grazing

Livestock pressure is reduced
and seedling trees abound,
holding the banks together

INDICATOR

MONITORING

Bank Stability



Grazing

Livestock pressure is reduced
and seedling trees abound,
holding the banks together

INDICATOR

MONITORING

Bank Stability



Erosion

Man-made barriers are
keeping soil in place

INDICATOR

MONITORING

Bank Stability



Erosion

Man-made barriers are
keeping soil in place

INDICATOR

MONITORING

Bank Stability



Fencing

Fences fail and cattle burst
through. They are
trampling the banks!

SETBACK

MONITORING

Bank Stability



Vehicles

Off-road vehicles don't see
the signs prohibiting riding
in the riverbed

SETBACK

MONITORING

Vegetation



Restoration

Volunteers planted young
cottonwood and willow trees.
They are thriving!

INDICATOR

MONITORING

Vegetation



Restoration

Volunteers planted young
cottonwood and willow trees.
They are thriving!

INDICATOR



MONITORING

Vegetation



Non-native plants

Non-native tamarisk and Russian olive are removed and replaced with native plants

INDICATOR

MONITORING

Vegetation



Non-native plants

Non-native tamarisk and Russian olive are removed and replaced with native plants

INDICATOR

MONITORING

Vegetation



Understory

Dense understory plants are supporting a diverse array of insect life

INDICATOR

MONITORING

Vegetation



Understory

Dense understory plants are supporting a diverse array of insect life

INDICATOR

MONITORING

Vegetation



High Canopy

Large native trees present and providing shade and nesting sites

INDICATOR

MONITORING

Vegetation



High Canopy

Large native trees present and providing shade and nesting sites

INDICATOR

MONITORING

Vegetation



Drought

A long term drought causes seedling cottonwood and willow trees to wither and die

SETBACK

MONITORING

Vegetation



Grazing

Cattle break through a fence and begin to graze on young cottonwood and willow trees

SETBACK



MONITORING

Flow



Legislation

New laws ensure and protect proper river flow amounts over time

INDICATOR

MONITORING

Flow



Legislation

New laws ensure and protect proper river flow amounts over time

INDICATOR

MONITORING

Flow



Agriculture

Farmers plant low-water use plants and reduce the amount of water they are pumping

INDICATOR

MONITORING

Flow



Agriculture

Farmers plant low-water use plants and reduce the amount of water they are pumping

INDICATOR

MONITORING

Flow



Water Treatment

Reclaimed water is returned to the river system

INDICATOR

MONITORING

Flow



Water Treatment

Reclaimed water is returned to the river system

INDICATOR

MONITORING

Flow



Industry

Industries adopt new manufacturing methods that require far less water

INDICATOR

MONITORING

Flow



Industry

Industries adopt new manufacturing methods that require far less water

INDICATOR



MONITORING

Flow



Dams

Dams upstream reduce river flow significantly

SETBACK

MONITORING

Flow



Floods

Large flooding events disrupt communities along the river's banks

SETBACK

MONITORING

WILD CARD



Student intern discovers new methods of measuring riparian health!

INDICATOR

ACTION



Monitoring instruments are washed away in a flood!

Take one **WATER QUALITY** monitoring card from another player

ACTION



Your work truck breaks down!

Take one **BANK STABILITY** monitoring card from another player

ACTION



Instrument malfunction!

Take one **FLOW** monitoring card from another player

ACTION



Student intern loses data sheet in the stream!

Take one **VEGETATION** monitoring card from another player

ACTION



Dishonest Politician

shift the blame to someone else

Pass **DISASTER** card to another player



ACTION



Dishonest Politician

shift the blame to
someone else

Pass **DISASTER** card to
another player

ACTION



Computer crashes and
you didn't back up your
data!

Take one monitoring
card from another player

ACTION



A film crew gets trapped
in a flash flood and you
have to rescue them!

Take one monitoring
card from another player

ACTION



Budget cuts!

Take one monitoring
card from another player

ACTION



Instruments buried
during flood!
Start digging!

Take one monitoring
card from another player

ACTION



Promotion!

You now manage another
river!

TAKE one **RIVER** card
from another player

ACTION



Retirement!

Your boss retires and it's up
to you to manage the river!

TAKE one **RIVER** card
from another player

ACTION



Land Acquisition!

Your agency acquires new
property

TAKE one **RIVER** card
from another player



ACTION



Land Acquisition!

Your agency acquires new property

TAKE one RIVER card from another player

ACTION



Smithsonian Institute awards you a grant!

The value of your research is finally recognized

BLOCKS theft of a RIVER card

ACTION



Presidential Medal!

You are awarded for your contributions to science

BLOCKS theft of a RIVER card

ACTION



The scientific community respects your expertise

BLOCKS theft of a RIVER card

ACTION



You help pass a new law protecting rivers

BLOCKS theft of a RIVER card

ACTION



Invasive Species!

Bullfrogs have invaded your river system

Make Another Player PUT BACK one RIVER card

ACTION



New Scientific Breakthrough!

Draw up to TWO cards

ACTION



New Scientific Breakthrough!

Draw up to TWO cards