


BANK 1 — PRE-MAP FINAL (50)

1 Fragmentation

Definition: Breaking continuous habitat into smaller, isolated patches.

Example: Forest cut by roads and housing.

 *Green map split by gray roads.*

Cue: Split but still exists.

2 Diving ducks

Definition: Ducks that dive underwater and require a running start to take off.

Example: Ducks diving deep and running on water to fly.

 *Duck running on water.*

Cue: Dive + running start.

3 Prescribed fire

Definition: Controlled use of fire to manage ecosystems.

Example: Planned burns to reduce fuel.


 *Fire with people controlling it.*

Cue: Planned, not wildfire.

4 Biomagnification

Definition: Increase of contaminants up the food chain.

Example: Small fish → big fish → bird with high toxins.


 *Arrows going up a food chain.*

Cue: Toxins increase upward.

5 Dabbling ducks

Definition: Ducks that feed on the surface or tip forward in shallow water.

Example: Ducks tipping with tails out.


 *Duck tails up.*

Cue: Surface feeding.

6 Taxonomy

Definition: Science of classifying organisms.

Example: Grouping species by genus/family.


 *Classification tree.*

Cue: Naming and grouping.

7 Adaptive management

Definition: Management approach using monitoring and adjustment over time.

Example: Try → monitor → adjust.


 *Cycle arrows.*

Cue: Learn and adjust.

8 Eutrophication

Definition: Nutrient enrichment causing algal blooms.

Example: Fertilizer runoff → green lake.

 *Green, slimy water.*

Cue: Nutrients → algae.

9 Energy flow

Definition: One-way movement of energy through ecosystems, lost as heat.

Example: Sun → plant → animal → heat.

 *Fading arrows.*

Cue: One way, heat loss.

10 Public trust doctrine

Definition: Wildlife managed for the benefit of all people.

Example: Government manages wildlife for public use.

 *Wildlife with public symbol.*

Cue: Public benefit.

1 1 Carrying capacity

Definition: Maximum population an environment can support.

Example: Too many deer → starvation.


 *Crowded habitat.*

Cue: Max supportable.

1 2 Eutrophication (repeat)

Definition: Nutrient enrichment causing algal blooms.

Example: Runoff → oxygen loss.

 *Green lake again.*

Cue: Same pattern.

1 3 Energy flow (repeat)

Definition: One-way energy movement lost as heat.

Example: Food chain energy loss.


 *Arrow fading.*

Cue: Never cycles.

1 4 Fragmentation (repeat)

Definition: Breaking habitat into isolated patches.

Example: Roads divide forest.

 *Patchy green map.*

Cue: Isolation.

1 5 Biodiversity

Definition: Variety of life at genetic, species, and ecosystem levels.

Example: Many species in one area.


 *Many different icons.*

Cue: Variety of life.

1 6 Sustainable harvest

Definition: Harvest based on population status and science.

Example: Fishing limits set by data.


 *Scale balanced.*

Cue: Science-based limits.

1 7 Invasive species

Definition: Non-native species causing harm.

Example: Species spreading and displacing natives.

 *One species overtaking others.*

Cue: Non-native + harm.

1 8 Diving ducks (repeat)

Definition: Ducks that dive and need running start.

Example: Deep diving ducks.


 *Running duck.*

Cue: Dive deep.

1 9 Carrying capacity (repeat)

Definition: Maximum supportable population.

Example: Habitat overcrowded.


 *Limit line.*

Cue: Population limit.

2 0 Succession

Definition: Gradual change in species composition over time.

Example: Grass → shrubs → forest.

 *Stages changing.*

Cue: Gradual change.

2 1 Biomagnification (repeat)

Definition: Increase of contaminants up the food chain.

Example: Top predators most toxic.

 *Upward arrows.*

Cue: Higher = worse.

2 2 Riparian buffers

Definition: Vegetated areas protecting waterways.

Example: Trees along streams filtering runoff.

 *Green strip by water.*

Cue: Vegetation + water.

2 3 Taxonomy (repeat)

Definition: Science of classifying organisms.

Example: Species categories.

 *Boxes within boxes.*

Cue: Classification.

2 4 Adaptive management (repeat)

Definition: Monitoring and adjusting actions.

Example: Change plan after results.


 *Feedback loop.*

Cue: Adjust over time.

2 5 Succession (repeat)

Definition: Gradual species change.

Example: Abandoned field to forest.

 *Timeline of plants.*

Cue: Gradual.

2 6 Biodiversity (repeat)

Definition: Variety of life.

Example: High species richness.

 *Many species icons.*

Cue: Variety.

2 7 Biomagnification (repeat)

Definition: Toxins increase up food chain.

Example: Birds most contaminated.

 *Top predator highlighted.*

Cue: Up the chain.

2 8 Hydroperiod

Definition: Seasonal pattern of water presence.

Example: Wetland flooded part of year.


 *Calendar + water.*

Cue: Timing of water.

2 9 Migration

Definition: Seasonal movement between habitats.

Example: Birds flying south for winter.


 *Arrows north–south.*

Cue: Seasonal movement.

3 0 Eutrophication (repeat)

Definition: Nutrient enrichment → algal blooms.

Example: Fertilizer runoff.

 *Green water.*

Cue: Nutrients.

3 1 Dabbling ducks (repeat)

Definition: Surface feeding ducks.

Example: Tipping ducks.


 *Tails up.*

Cue: Shallow water.

3 2 Eutrophication (repeat)

Definition: Nutrient enrichment.

Example: Oxygen depletion.


 *Fish gasping.*

Cue: Algae bloom.

3 3 Sustainable harvest (repeat)

Definition: Science-based harvest.

Example: Quotas set by data.

 *Balanced scale.*

Cue: Sustainability.

3 4 Energy flow (repeat)

Definition: One-way energy movement.

Example: Energy lost as heat.


 *Fading arrow.*

Cue: No recycling.

3 5 Public trust doctrine (repeat)

Definition: Wildlife for public benefit.

Example: Public ownership.

 *Public symbol.*

Cue: Managed for all.

3 6 Migration (repeat)

Definition: Seasonal movement.

Example: Animal relocation by season.


 *Moving arrows.*

Cue: Seasonal.

3 7 Migration (repeat)

Definition: Seasonal movement.

Example: Same pattern.


 *Same arrows.*

Cue: Repeat concept.

3 8 Biodiversity (repeat)

Definition: Variety of life.

Example: Diverse ecosystem.

 *Many species.*

Cue: Variety again.

3 9 Dabbling ducks (repeat)

Definition: Surface feeders.

Example: Shallow ponds.

 *Tails up.*

Cue: Surface.

0 Succession (repeat)

Definition: Gradual change.

Example: Forest regrowth.

 *Stages.*

Cue: Time + change.

1 Succession (repeat)

Definition: Gradual species replacement.

Example: Same pattern.

 *Timeline.*

Cue: Gradual.

2 Dabbling ducks (repeat)

Definition: Surface feeding ducks.

Example: Same behavior.


 *Tipping ducks.*

Cue: Shallow.

3 Adaptive management (repeat)

Definition: Monitor and adjust.

Example: Change after results.

 *Loop arrows.*

Cue: Adaptive.

4 Adaptive management (repeat)

Definition: Learning-based management.

Example: Same cycle.

 *Circle.*

Cue: Adjust.

5 Adaptive management (repeat)

Definition: Adjust using monitoring.

Example: Policy update after data.

 *Cycle.*

Cue: Learn + act.

6 Adaptive management (repeat)

Definition: Flexible management.

Example: Same approach.

 *Loop.*

Cue: Flexible.

7 Adaptive management (repeat)

Definition: Ongoing adjustment.

Example: Same.

 *Circle.*

Cue: Repeat.

8 Adaptive management (repeat)

Definition: Management informed by monitoring.

Example: Same.

 *Feedback loop.*

Cue: Monitor → adjust.

9 Adaptive management (repeat)

Definition: Iterative decision-making.

Example: Same.


 *Loop.*

Cue: Iterative.

5 0 Adaptive management (repeat)

Definition: Learning-based management over time.

Example: Same cycle.

 *Continuous loop.*

Cue: Over time.