Earth system: field sheet.

Name: Class: Date:

Use this sheet with the lesson, then take it into the field for a local study. Each box follows a screen. Write what you observe and where your evidence comes from.

SCREEN 2 The four spheres

a **Components of each sphere at the Coorong or at your own site:**

SPHERE	COMPONENTS YOU CAN SEE	HIDDEN COMPONENTS AND PROCESSES
Geosphere		
Atmosphere		
Hydrosphere		
Biosphere		

b **One hidden component or process, and the evidence you could collect for it in the field:**

SCREEN 3 Links between spheres

a **Write one interaction in each box. A box on the diagonal is an interaction within one sphere.**

FROM ↓ TO →	GEOSPHERE	ATMOSPHERE	HYDROSPHERE	BIOSPHERE
Geosphere				
Atmosphere				
Hydrosphere				
Biosphere				

SCREEN 4 A web of interactions

a **Draw a web for your site: at least six components, an arrow and a + or – sign on each link, and one feedback loop marked R or B.**

SCREENS 5 AND 6 Scales and patterns

a **Four changes at your site or the Coorong:**

CHANGE	HOW LONG IT TAKES	HOW FAR IT REACHES	NATURAL, HUMAN OR BOTH

b **A cyclic pattern and an unpredictable one in data, with the time-scale of each:**

SCREENS 7 AND 8 Past and future

a How a spill moved through the spheres, and one effect that lasted for years:

b My prediction for the South Lagoon of the Coorong, and two things that limit it:

SCREEN 9 My study plan

a My question:

b Variables:

VARIABLE	WHAT IT IS	HOW I WILL MEASURE IT
Independent		
Dependent		
Controlled		

c Equipment, with the number and size of each item, and the steps I will follow at each site:

d Hazards and how I will reduce the risk:

HAZARD	HOW I WILL REDUCE THE RISK

e Secondary data I will compare with my own, and what it adds:

f Who could use my findings: