



## Section C: Transitioning to Rio Nuevo

### Discussion and Procedure: Transitioning to Rio Nuevo

Let's look at ways to make Rio Manso more like Rio Bravo.

Today's land managers know more about the effect of the major projects installed along the Rio Grande in the 20th century. They are now taking measures to ensure a variety of habitats that will provide appropriate places for the natural biodiversity of the valley and improve the situation for some endangered and threatened species.

Divide students into nine teams and pass out a "Rio Nuevo Habitat Restoration Project" card to each team. Have students read the information on their cards and follow the instructions to make changes on the model. (An alternative way to manage this activity is to have the class work as a group on each project. This works particularly well with small class sizes.)

Have each team tell the class what their project was and what changes they made on the model. Explain that we call this new river **Rio Nuevo**.

Share the story of an actual restoration project, "Bulldozers in the Bosque" (page 160), to discuss a real-world project, the Albuquerque Overbank Project, and its effects.

Ask the students if they see the potential for other projects that will help to restore the river. *Encourage them to come up with original ideas and make the changes on the model.*

Ask the students to explain the differences between Rio Nuevo and Rio Manso:

- *more opportunity for the next generation of cottonwood trees*
- *more natural river features, such as meanders, oxbows, braids*
- *fewer exotic species*

...the list will vary

Today's river has elements of both river concepts we used in our model. Ask the students to give examples of how the Rio Grande today is like Rio Manso and Rio Nuevo.

Rio Manso

*Levees, jetty jacks, Russian olive trees, saltcedar stands, etc.*

Rio Nuevo

*Pole plantings, fewer exotic species, new marshes built, etc.*



At this point you may want to continue with model activities “Cottonwood Creation,” “Who Lives Where?,” “Who Grows Where?” or “Bosque Chaos” that have Rio Nuevo sections.

**Assessment:** To celebrate finishing the River of Change unit have students decorate three cakes for the three different river models they studied.

Materials: three sheet cakes with plain icing; squeeze icing in different colors, knife, plates, napkins and forks. Divide class into three teams, assign each team either Rio Bravo, Rio Manso, or Rio Nuevo. Have them decorate their cake appropriately. A spokesman for each team then tells the rest of the class what they put on their river model. Then have a party and eat the cakes!

Have students draw the three rivers on their own. This could be done at the end of each section (Rio Bravo, etc.)

Have students write about the differences between the rivers, what changes have occurred and what is being done to protect and restore the ecosystem today.

**Extensions:** Until relatively recently, flooding in the Rio Grande Valley was a common and often devastating occurrence for human settlements. The math worksheet “How Long Ago?” on page 189 will help students realize that floods occurred in the Albuquerque region in the not too distant past. Make a copy of the worksheet for each student. Have students subtract the year for each event listed from the current year to determine how long ago these floods occurred.

Have students pay attention to the news for items related to the bosque and the river. There are many issues that regularly appear in the news: endangered species, water planning/water sources, fires, clean-up activities, etc. Post newspaper items in the classroom; have students report on the news they have heard to the rest of the class.

An additional activity about invasive plant species can be found in: The Watercourse. 2001. *Discover a Watershed: The Rio Grande/Rio Bravo*. Bozeman, Montana: The Watercourse. “An Invited Guest, that overstayed its welcome,” p. 259.

### **Adapting to Other Grades**

For younger primary grades, do a felt-board example of the basic items that are part of the bosque—a river, cottonwood trees, sand bar, etc. before working with a model of the river. Place a velcro dot on River Model pieces for use on the felt board.