

February 12, 2012

Memo to:
United States Government
Department of the Big Long River

To the Managers of the Big Long River,

Rapid Scheduling Incorporated was thrilled to receive your request for our optimization software. As a rapid scheduling company we are very familiar with your type of request. We have taken the liberty of preparing a scheduling program which will schedule all the visitors to your river with ease. Fear not, it comes with an easy-to-use interface, sampled at the bottom right of this letter.

The scheduler is prepared to handle any type of request. This includes each visitor's preferred boat type, departure date, and how long they'd like to spend on the river each day. Naturally, visitors will have their own campsites for each night they spend on the river. The program will even calculate how happy your visitors will be at the end of their trip. A visitor's estimated happiness will fall if they pass or are passed by another group during their trip, if they spend more or less time on the water than they desire, or if they cannot be scheduled.

There are some constraints that you should be aware of before implementing our software. We assume that campsites are evenly spaced along the river. We also assume that visitors are willing to follow the schedule we assign them. The software implements a tolerance for the distance each visitor will travel every day. While exercising this tolerance does decrease the happiness of a visitor, it also allows many more visitors to travel the river each season.

For instance, a 180 day season allowing visitors no tolerance (they always travel the distance they want) might only allow 173 visitors per season, and only if they leave consecutively and all travel the same speed. By increasing the tolerance to just two campsites per night, however, it is quite possible to allow up to 300 visitors each season, whose speeds and departure dates are completely random.

The software is capable of scheduling more than 600 visitors per season. Their speeds, departure dates, and the amount of time they desire on the river, however, may need to be very specific. With 600 visitors per season, only about 5% of completely random combinations will work.

Your river is big and long, and it deserves to be appreciated by as many visitors as possible. Our software can help you do just that.

Keep paddling,

Rapid Scheduling, Inc.

The screenshot shows a software window titled "Rapid Scheduler, Whitewater Version". It features several input fields and buttons. The "Season" field is set to "Summer 2099" with a dropdown arrow and an "Add Another Season" button. The "Available Campsites" field is set to "128" with a "View Campsites" button. The "Last Group Added:" section shows "Leader: Paddlehard, Neverdo I.", "Motorboat from 6/15/99 to 6/22/99", and "4 hours rafting each day", with a "View/Add Groups" button. A large "Schedule!" button is positioned to the right of this section. Below these is a "Progress: Done!" indicator with a full green bar. At the bottom, a summary box states "183 rafting groups successfully scheduled for summer 2099" and "Groups are 98.7% happy", with a "View Schedules" button.