

FIGURE 31.2 Datasheet and checklist for nutrient diffusing substrata construction, deployment in the field, and laboratory processing (*Basic Method*).

Stream name _____ Date _____
Crew _____
Date NRS placed in field _____
Date NRS collected from field _____
NRS deployment location _____

NDS construction

- ☐ Purchase materials
- ☐ Drill openings in polycarbonate cup lids
- ☐ Drill holes in L-bars
- ☐ Prepare agar with nutrient treatments
- ☐ Fill Polycarbonate cups with solution and allow to harden
- ☐ Place fritted glass discs on top of dried agar and close
- ☐ Secure Polycarbonates to L-bar tightly with cable ties
- ☐ Place silicon beads on bottom of polycarbonates to secure in place
- ☐ Cover L-bars with plastic wrap to keep moist and refrigerate

NDS deployment and collection

- ☐ Secure L-bars to benthos with stakes at each end
- ☐ Incubate ~17 days
- ☐ Collect L-bars, remove discs, and place in individually labeled Ziplocs
- ☐ Extract and measure concentrations of chlorophyll *a* on discs