

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 locaton _____

NDS construction

- Purchase materials
- Drill openings in polycon cup lids
- Drill holes in L-bars
- Prepare agar with nutrient treatments
- Fill Polycon cups with solution and allow to harden
- Place fritted glass discs on top of dried agar and close
- Secure Polycons to L-bar tightly with cable ties
- Place silicon beads on bottom of polycons 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