

LINX II Verbal Site Descriptions

SiteID	Text Notes
OR_REF_1	Second growth forest, gravel road along one bank. 15N contamination of some samples.
OR_AGR_2	Deciduous gallery forest along stream, heavily grazed pasture on both sides. One recording sonde did not work during metabolism run.
OR_URB_1	Narrow gallery forest surrounded by parking lots, roads, campus buildings. Channel deeply incised with "hardpan" substrate at lower end of study segment. Huge temporary increase in stream discharge 4 hours after drip started; upstream wave research facility performed emergency emptying of wave tank (i.e., we had a tsunami at the stream site). 15N contamination of some samples.
OR_REF_2	500 year old coniferous forest, site of first LINX release in 1998
OR_AGR_2	Deciduous gallery forest, pasture and roads along stream; dead cow in creek below dripper, illegal water withdrawal below downstream most sampling point.
OR_URB_2	Downtown Eugene, Oregon. Stream completely lined with concrete, banks (really walls) of stream at least 5 meters high. Shopping carts, parts of bicycles, hypodermics common.
OR_REF_3	Predominantly alder riparian forest, industrial forest land. Heavy log truck traffic on road crossing upstream of isotope addition.
OR_AGR_3	Grass fields surround site, minimal riparian vegetation, dirt farm road along part of study segment.
OR_URB_3	Park in downtown Albany, Oregon. Duck/goose pond immediately upstream of dripper site. Stream segment bordered by grass and concrete bike path. Heavy cover of macrophytes.
SW_AGR_2	No post-72 hour or post-1 week sampling due to flood.
SW_URB_2	No gas samples collected due to large flow changes during release. Site very shaded.
SW_AGR_1	Data from one metabolism sonde lost.
SW_URB_1	Data from metabolism limited to one sonde.
NC_AGR_1	Narrow, open stream in lightly-used cattle pasture. Blips in conservative tracer run (1 week prior to isotope) likely correspond to a washing machine discharging into the stream. Observed soap suds the night before the 15N injection.
MA_AGR_3	Beaver dam upstream of sample reach. Ag (small farm row crops- corn, squash, etc.) surround stream, but not all watershed in Ag. Problem with Plateau2 sampling: tubing in drip solution lost end weight, so inlet came out of solution. Drip restarted, and then sampled 5 hours later. Unable to sample entire reach at that plateau. Suzanne Thomas concerned because NO3 concentrations change so much along the reach. Also, all chlorophyll samples lost, freezer problem.
MA_REF_3	Swampy site with beaver dam just upstream, lots of NH4 and low DO. This very shallow stream drains a swamp, and had very low DO; much of the O2 production is likely from re-aeration. Probably high nitrification rate. There were abundant freshwater sponges present in the stream with bright green symbionts. Also, all chlorophyll samples lost, freezer problem.
MA_URB_3	Forested stream surrounded by suburban housing development. Major flood during 15N addition. The flows got so high the 15N container was knocked over and poured into stream. Flood caused by an upstream pond being lowered just prior to Plateau 1 sampling. Did second 6 hour 15N release after first attempt at full injection flooded out. PRE samples are from before the flood, the one plateau

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	was afterwards. No Br tracer data due to extreme dilution. Re-aeration data and benthic samples based on very different situations of flows, turbulence, etc. All chlorophyll samples lost in freezer incident.
MA_AGR_2	Narrow, open stream with row crops nearby. Local farm w/ CSA, not big AG. Small farm row crops in watershed. Forest along one side of stream at end of reach. Very mucky stream, likely lots of slow exchange between sediment & stream water.
MA_URB_2	Lovely forested stream behind homes in suburban Boston neighborhood. Old, large trees, but stream very flashy during rain events. NOTE: No plateau 1 data: drip tubing clogged up the debris in 15N container. Only sampled at Plateau #2. Drip off for approximately 5.5 hrs (estimated from volume of solution left over).
MA_AGR_1	Small farm cattle pasture in watershed. No chlorophyll data, samples lost.
MA_REF_1	Beaver dam upstream of reach. Low DO at top of reach. Forested all along reach.
MA_REF_2	Forested reach. Cobble-bottom. Riffly
MA_URB_1	Forested stream in suburban Boston neighborhood. Very shallow stream with deep FBOM bottom. Slow-moving. Very slow-moving stream. Few riffles. Thick, thick wader-sucking muddy stream bottom.
PR_AGR_1	Quebrada. Cattle, chickens, goats. Very open and sunny. Stream runs through mostly cow pasture, some horses on the land too. No riparian cover. Sandy bottomed stream very similar to our long term study sites in the Rio Icacos. Exists on a quarts diorite intrusion.
PR_URB_1	Petunia. Trees bordered stream which ran through a housing complex. Stream very incised. Evidence of occasional sewage overflow inputs to stream. In general, smelly stream. Only site in San Juan metro area. Mostly palm forest where exists. Stream very abundant in inverts and fish. Day 1, rained a little once again. Day 2, only security issues. Post 72, had a large rain since Post 24 sampling, which may have cleaned out some of our 15N.
PR_URB_2	M-Trib. Nasty, nasty stream. Overflowing sewage (from the prison up the hill) entering upstream of our reach. Dead chickens in stream and on bank behind cock fighting arena. Hypodermic needles found on several occasions. A gross stream, but we got great data! Urbanized tributary to Rio Mameyes, a well-studied river in LUQ LTER. Stream transects couple of small streets. Cock fighting rink near stream, losing roosters are dumped into stream to die & decompose. Found many bones in stream bottom. City sewage line must have clogged up, raw sewage poured out of a manhole and drained right into the stream right above our 15N experiment. Did not realize it until experiment was mostly over. Patterns in N clearly affected.
PR_AGR_2	Maizales. Banana plants, grass, horses, and houses along reach. Very little riparian cover, so very sunny. Nice stream, in general. 2 nd YSI (downstream) stolen.
PR_REF_2	Rio Icacos Trib (RIT). Sandy-bottom, low-gradient, high elevation stream. Small tributary to one of our long term study sites: Rio Icacos. Heavily forested, high elevation. Mostly Palo Colorado. Watershed on a quartz diorite intrusion, all streams are sandy bottomed.
PR_URB_3	Ceiba. Low-gradient, wide, cobbly stream. Urban stream in area not well studied. Good riparian cover. Stream transects highway upstream of experimental reach. Also transects 2 side streets within reach. Several houses along reach.
PR_AGR_3	Vaca. Thick mud around stream (cattle pasture). But stream itself is tree-lined and cobble-bottomed. Stream runs through cow pasture, but different than other 2 AGR sites because has good riparian zone. Mostly bamboo with some palms.

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PR_REF_3	Pared. A very steep-gradient stream. Boulders and cobble bottom. Small forested stream in LUQ LTER, not well studied however. Stream has higher width to depth ratio than most streams in forest.
PR_REF_1	Long term ecological study site in Bisley, LUQ LTER.
MI_REF_1	Sand Creek: Deciduous forest.
MI_AGR_1	Steinke Drain: Row crop agriculture with some tile drains.
MI_URB_1	DORR: Suburban parklike environment with turfgrass to edge of channel.
MI_REF_2	Bullet: Mature deciduous forest (military land).
MI_AGR_2	Buskirk: Row crop agriculture.
MI_URB_2	Wayland: Urban with parking lots and stormwater runoff.
MI_REF_3	Honeysuckle: Deciduous forest (state recreation area); impoundment just upstream (wetland restoration on military land).
MI_AGR_3	Bellingham: Dugout channel draining row crop agriculture; drained muck soils.
MI_URB_3	Arcadia: Urban creek with stormwater runoff; LINX reach in school grounds with turfgrass and parking lot.