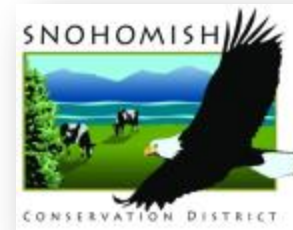




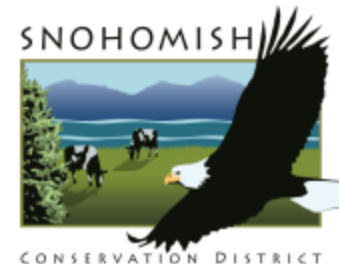
Managing Mud, Manure & Pasture on Horse Properties



Your Presenters:



Bobbi Lindemulder
Program Manager
District Operations,
Snohomish
Conservation District
Lake Stevens, WA



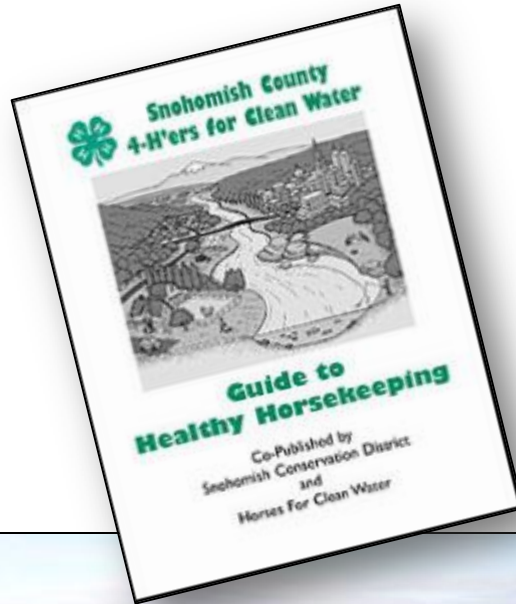
Snohomish CD Small Farm Program

- Historically commercial programs (dairy, crop)
- Small farm program originated in 1992
- Farm planning since 1997, provided about 100 visits/year
- Today, 4 full time farm planners
- Last 5-year period we've provided almost 2,000 site visits
- Primarily 5 acres in nature but range from a city lot to more than 1500+ acres
- Every livestock type including exotic and dairy
- Starting to see increased need for small crop, flowers (truck farming), CSA and nursery growers as well as wildlife improvements and LID





Alayne Blickle & Horses for Clean Water



- Classes, farm tours, workshops, educational materials, individual consultations
- Environmentally friendly ways of keeping horses



Why “Clean Water?”

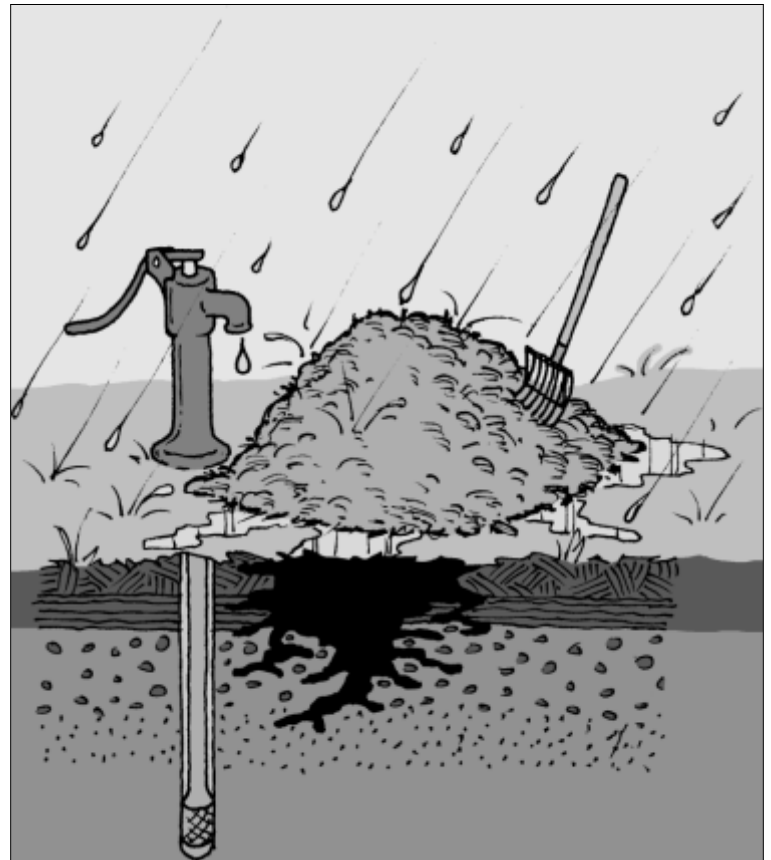
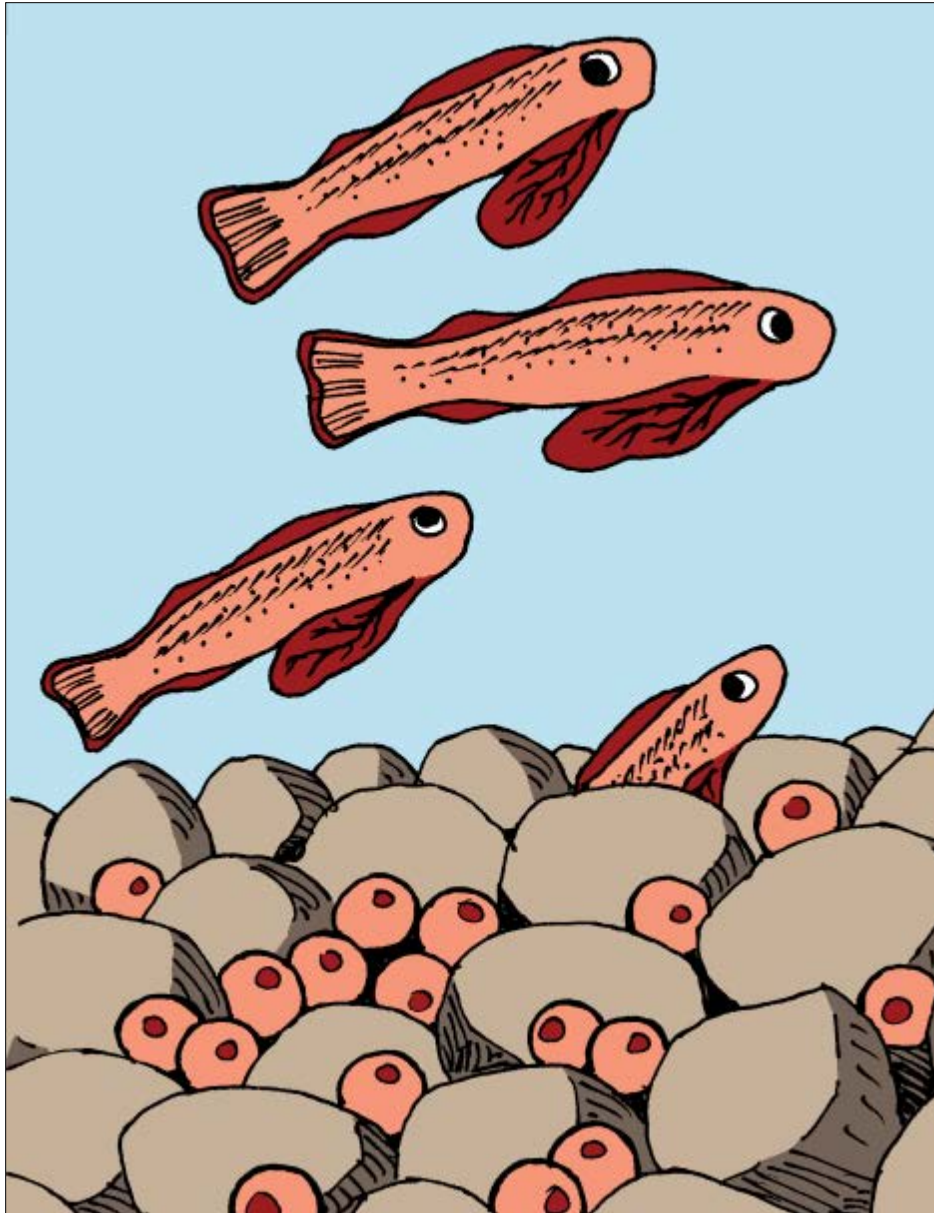
Runoff from muddy horse properties, over-grazed pastures, or manure piles can cause problems!



Mud & runoff on horse properties causes problems



- For horse health
- For owner convenience & chore efficiency
- For the productivity of the property
- For neighborhood esthetics
- For the environment...





Take home message...

Equine BMPs are good for...

- horse health
- chore efficiency
- farm or ranch productivity
- property esthetics for you (& your neighbors) to enjoy
- save you money
- environmental health



6 Tips for Reducing Mud, Managing Manure & Creating Pasture

1. Establish a sacrifice area
2. Pick up manure regularly & compost it
3. Use footing in paddocks & high traffic area
4. Install gutters & downspouts
5. Divert/manage surface flows
6. Use rotational grazing



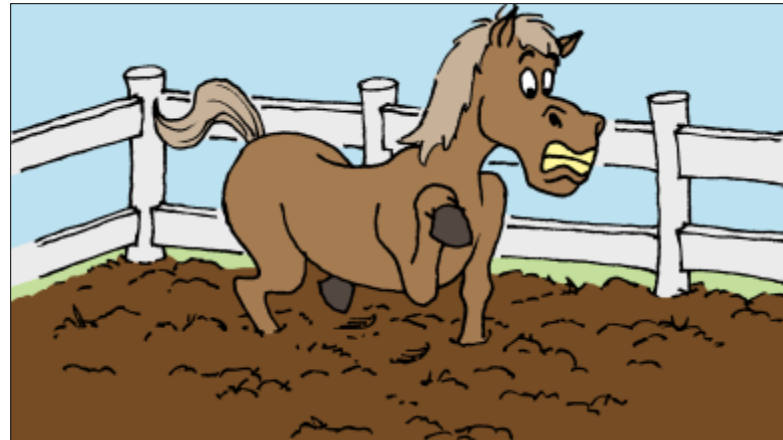
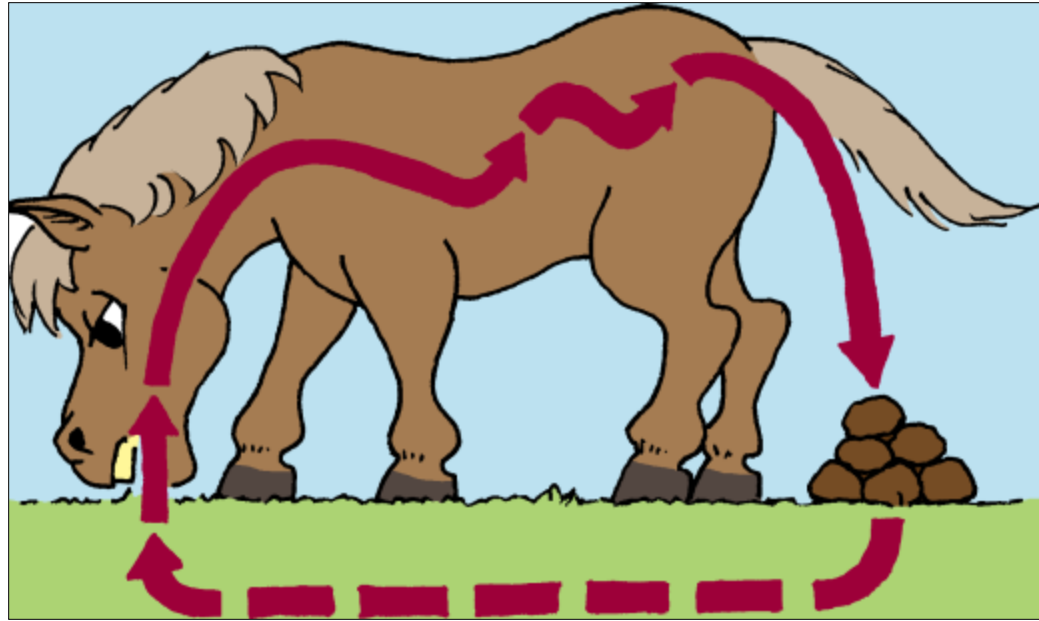
1. Establish a sacrifice area











2. Pick up manure regularly





Compost that manure!

- Bins can be built from a variety of materials
- Many creative designs & ideas
- Tailor them to meet your needs



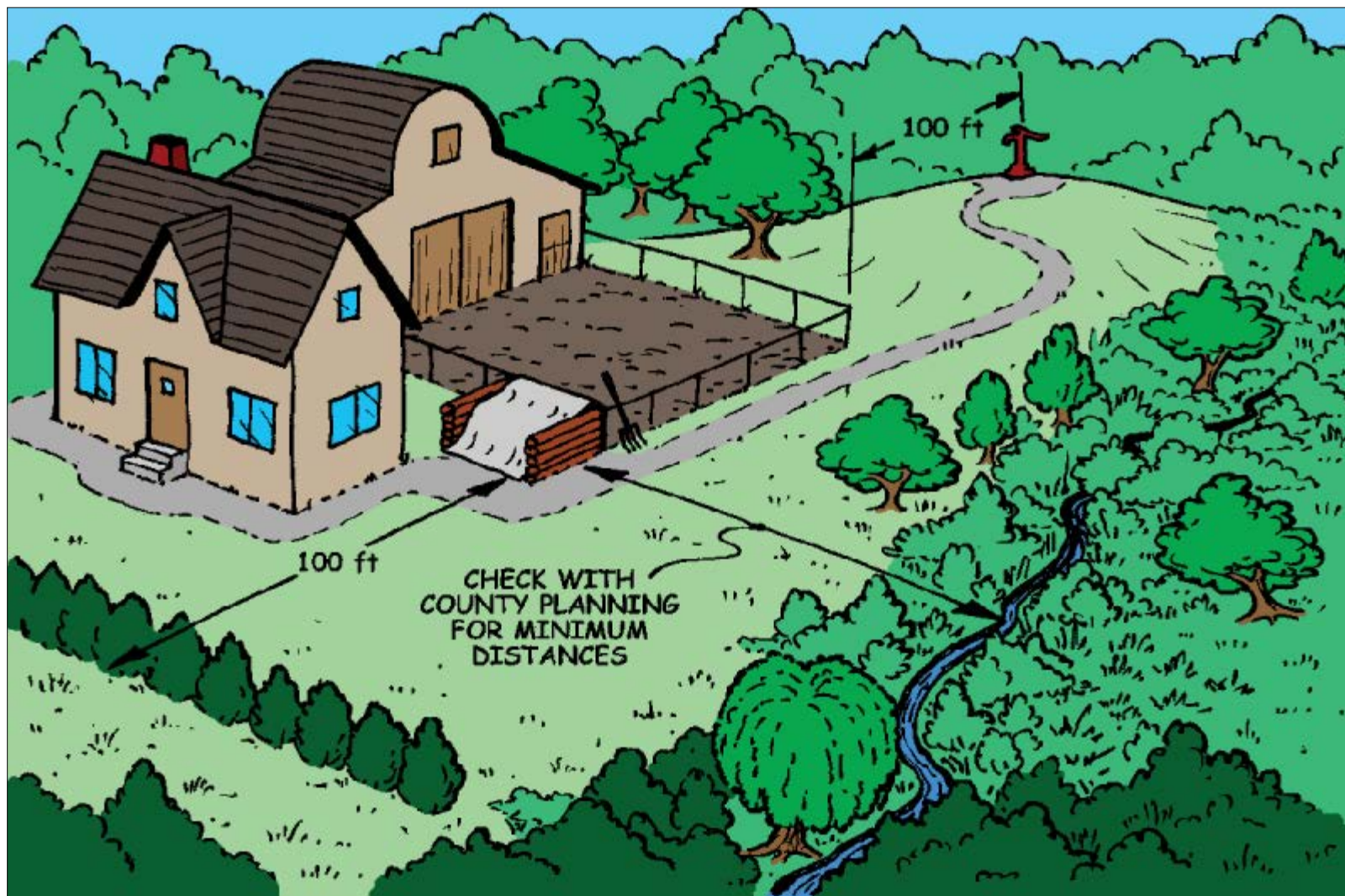
Ecology block bins



Locate your compost for chore efficiency

- Easy in
- Easy out





Compost Application Guidelines



- Apply to pastures, lawns, gardens
- Apply only during growing season
- Apply about ¼” at a time
- Apply no more than 2-3” per year

- Many Districts now offer spreader rentals!



3. Use footing material
in sacrifice areas
& high traffic areas











Other footing options for high traffic areas

- Stall mats
- Belting
- Grid products
- Geotextile fabric
- Cement pads





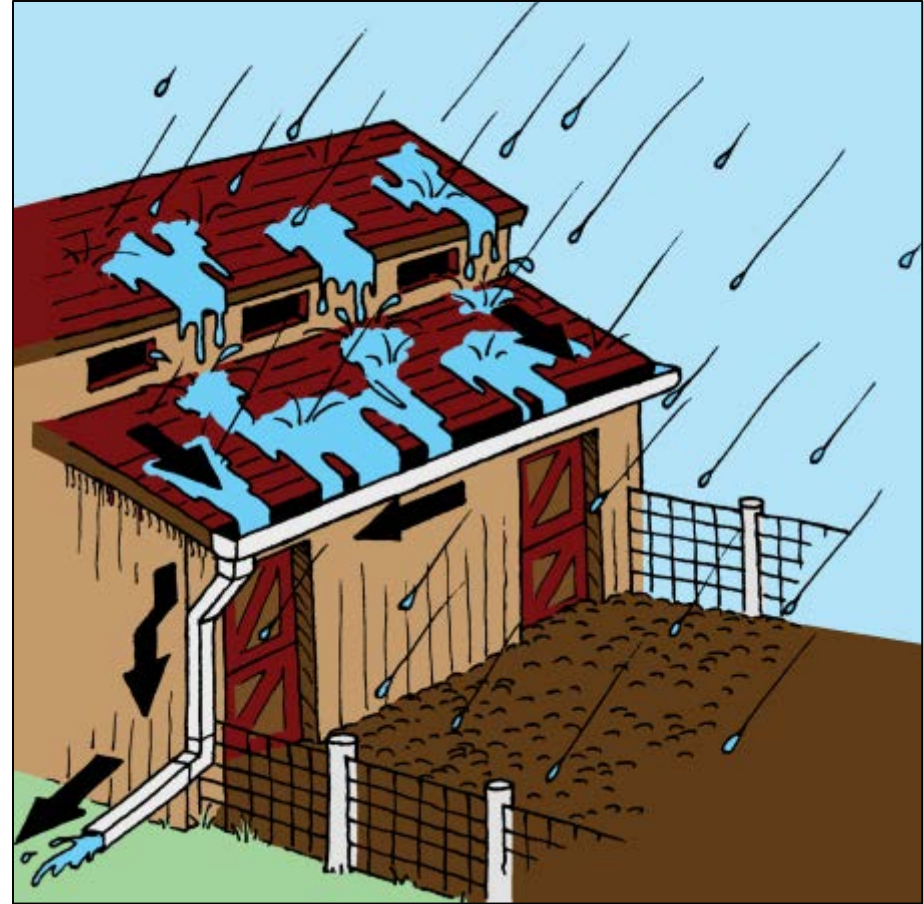








4. Install gutters & downspouts













5. Reroute surface water runoff & reduce impervious surfaces

- French drains
- Dry wells
- Rain gardens
- Water diversion bars
- Culverts
- Grassy swales
- Native trees & shrubs










One type of water
diversion bar

Outdoor
washracks:
pervious &
mud free!





Use native trees & shrubs as
mud managers



A mature Douglas fir tree can
drink up to 250 gallons of
water per day!



6. Manage pastures with rotational grazing system

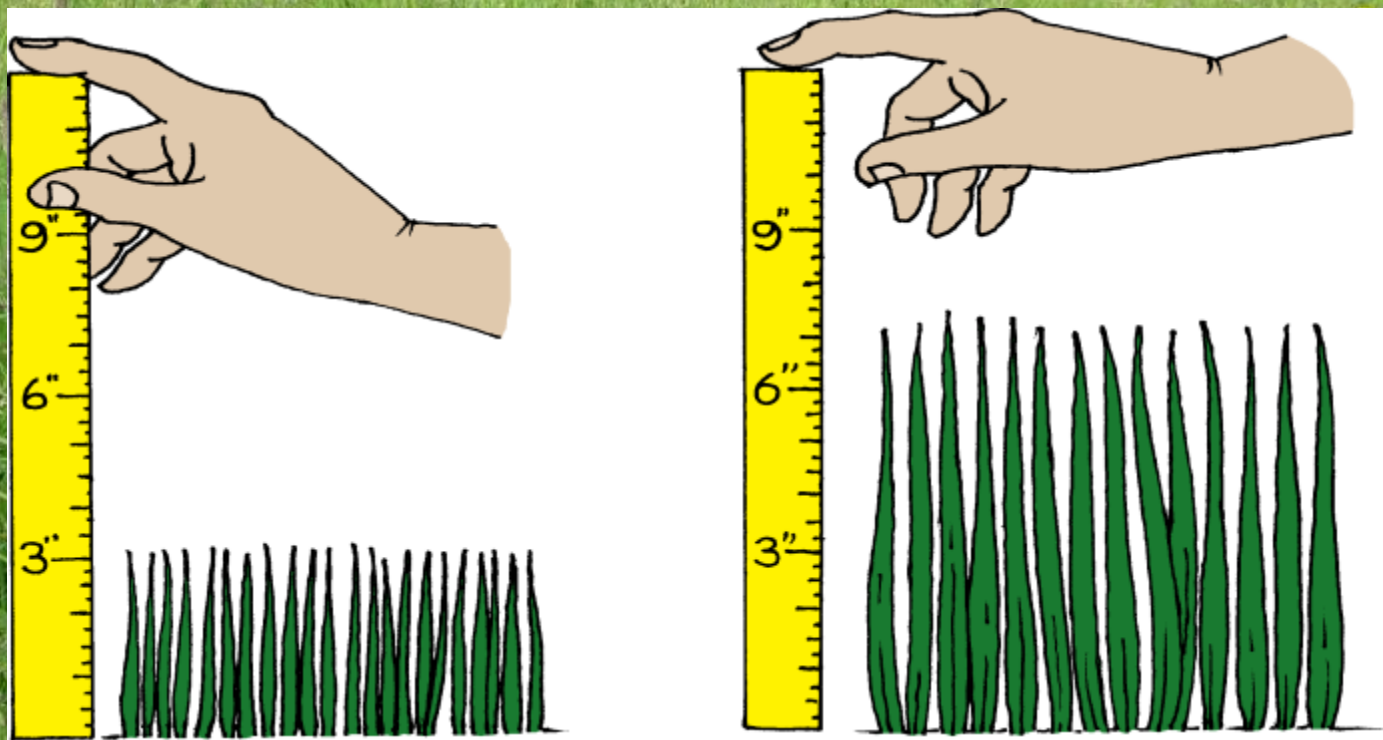
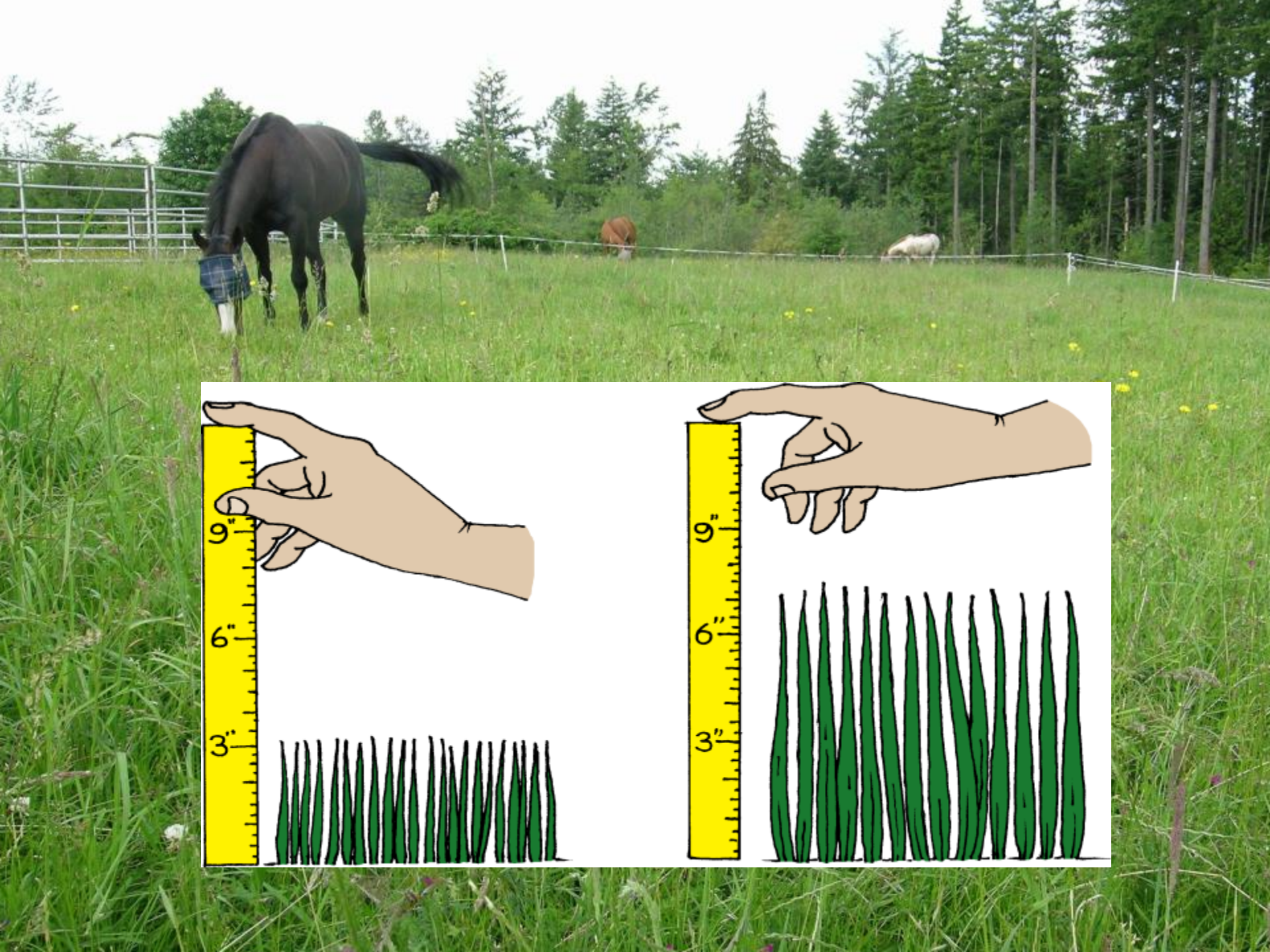


A dark-colored horse is grazing in a lush green pasture. The horse is wearing a blue and white plaid halter. In the background, two other horses are visible: a brown one and a white one. The pasture is enclosed by a white fence, and there are tall evergreen trees in the distance under a cloudy sky.

**Turn horses out on pasture
when grass is 6" - 8"**

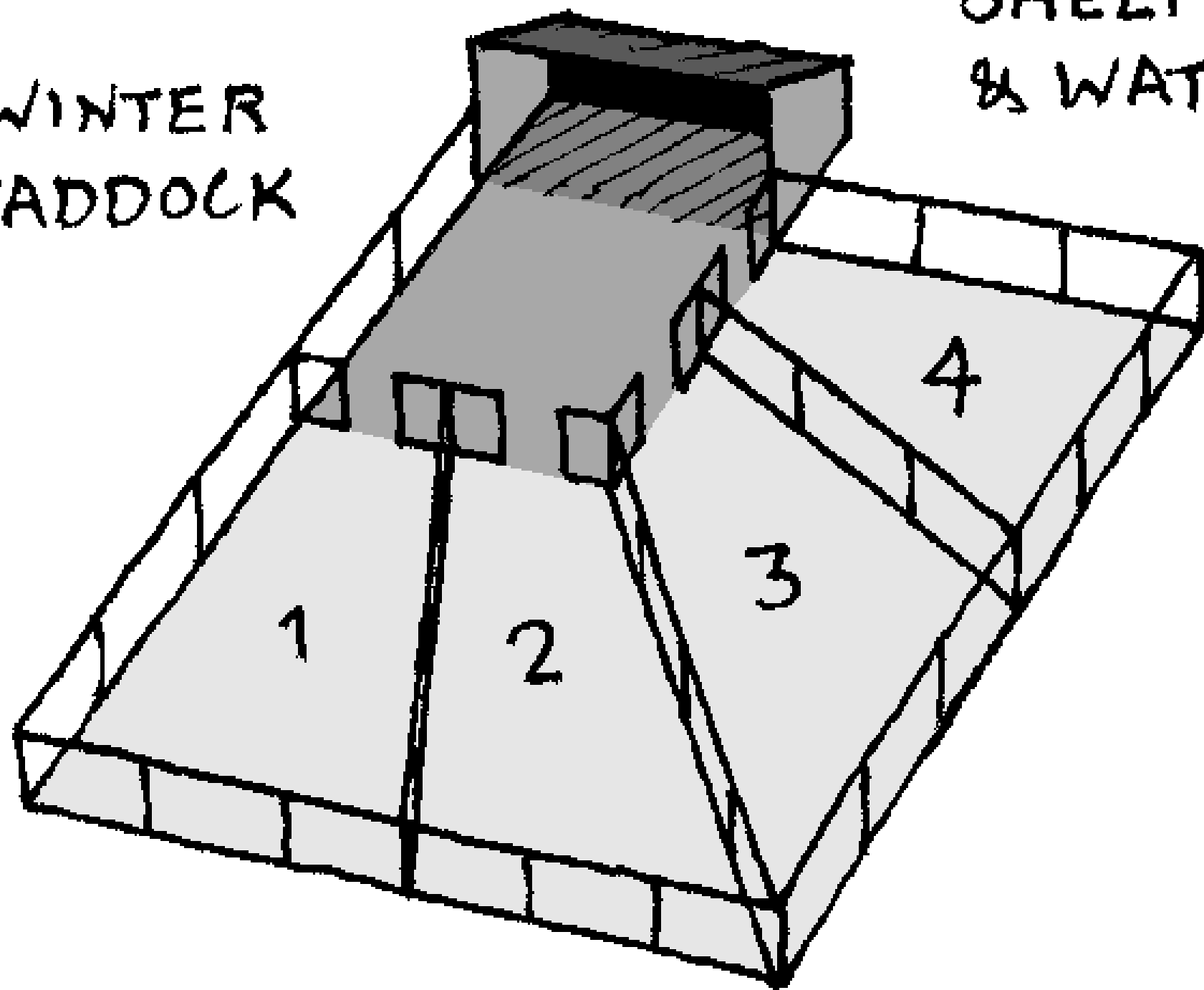
A dark-colored horse is grazing in a lush green field. In the background, two other horses, one brown and one white, are also grazing. The field is enclosed by a white fence, and a line of tall evergreen trees is visible in the distance under a cloudy sky.

**Take horses off pasture
when grass is 3" - 4"**



WINTER
PADDOCK

SHELTER
& WATER



Mowers

A brush hog
(pasture mower)
to a riding lawn
mower can all be
very useful



Harrows



Tine harrow

Home made
harrow





Managing mud, manure & pasture on horse properties...

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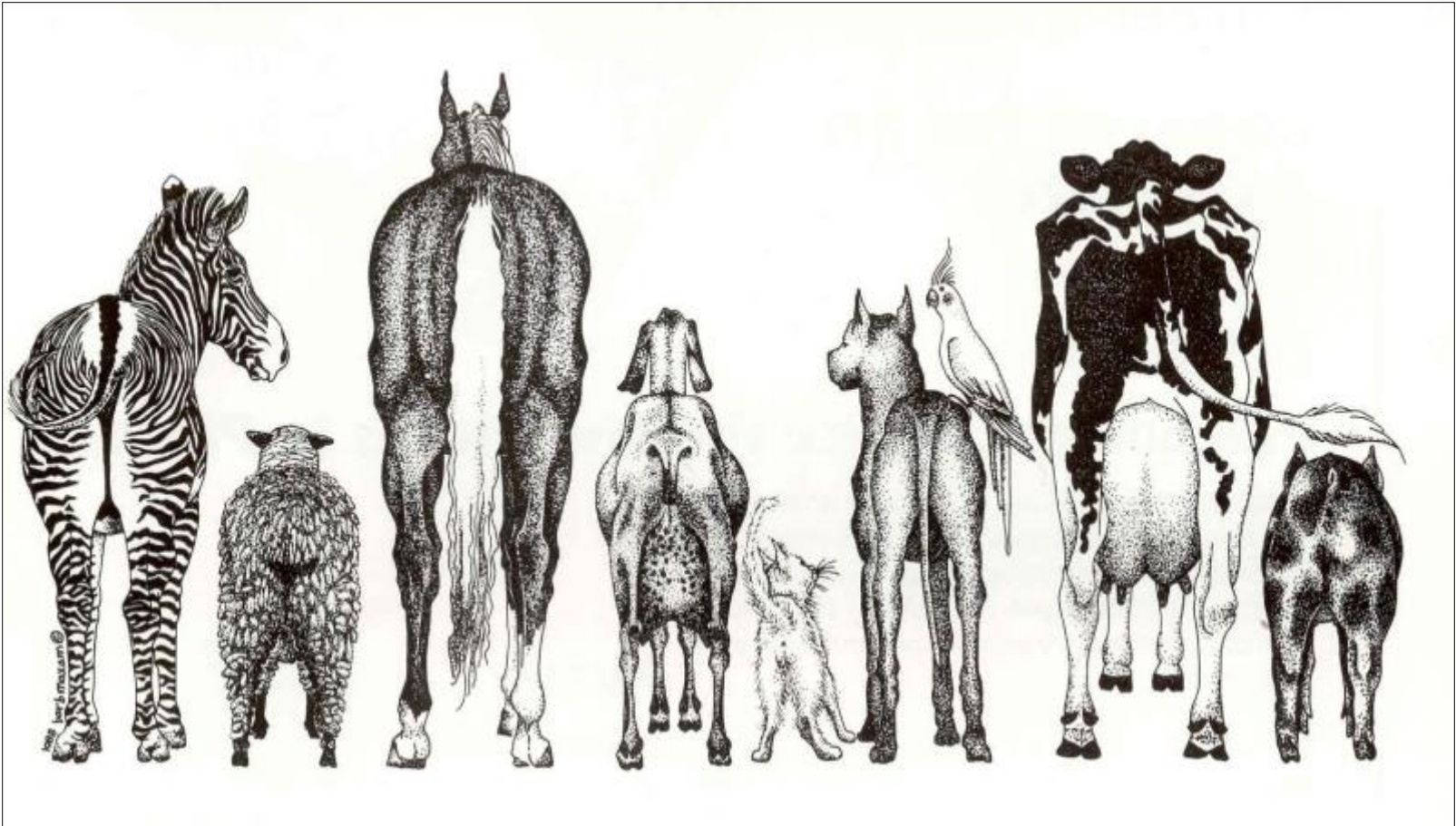
Resources to follow up with:

- Snohomish CD Tip Sheets, newsletters, Facebook, websites...
- Better Ground website - *betterground.org*
- HCW email list, newsletter, website, tip sheets – *horsesforcleanwater.com*
- HCW Face Book
- TheHorse.com
- Consulting with Alayne





The End(s)



www.horsesforcleanwater.com